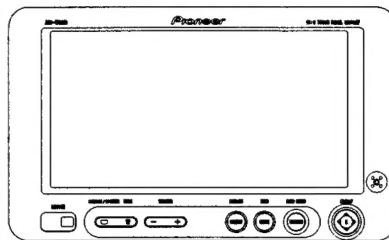


Service Manual



AVD-W6210/UC

ORDER NO.
CRT3107

16:9 TOUCH PANEL DISPLAY

AVD-W6210 UC, EW

● This product has the unit part numbers as below.

Unit Part No.	Description
CPN1867	Monitor Assy(AVD-W6210/UC)
CPN1879	Power Supply Assy(AVD-W6210/UC)
CPN1857	Monitor Assy(AVD-W6210/EW)
CPN1858	Power Supply Assy(AVD-W6210/EW)

*)The unit part numbers listed above are not for the service components.



For details, refer to "Important symbols for good services".

PIONEER CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.
PIONEER EUROPE NV Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 253 Alexandra Road, #04-01, Singapore 159936

A

[Important symbols for good services]

In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely. When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety

You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments

To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

B

3. Cleaning

For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws

To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

C

5. Lubricants, glues, and replacement parts

Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount. For replacement parts or tools, the prescribed ones should be used.

D

SAFETY INFORMATION

CAUTION

E

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

F

Health & Safety Code Section 25249.6 - Proposition 65

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1. SPECIFICATIONS

● AVD-W6210/UC

General

Power source	14.4 V DC (10.8 — 15.1 V × allowed)
Grounding system	Negative type
Max. current consumption	1.5 A
Backup current	1 mA or less

Display Unit

Screen size/Aspect ratio	6.5 inch wide/16:9 (effective display area: 154 × 87 mm)
Pixels	336,960 (1,440 × 234)
Type	TFT active matrix, transmissive type
Color system	NTSC/PAL compatible
Operating temperature range	-10 — +50 °C [+14 to 122F°]
Storage temperature range	-20 — +80 °C [-4 to 176F°]
Built-in Speaker	ø 36 mm [1 - 3/8 in.]
Dimensions	188 (W) × 114 (H) × 32 (D) mm [6 - 3/8 (W) × 4 - 1/2 (H) × 1 - 1/4 (D) in.]
Weight	469 g (1.0 lbs)

Hide-away Unit

External video input level	1 Vp-p/75Ω
External audio input level	1 V/22 kΩ
Max. output impedance	1 Vp-p/75Ω
External audio max. output level	1 V/1 kΩ
Dimensions	162 (W) × 38 (H) × 85 (D) mm (excluding protruding parts) [6 - 3/8 (W) × 1 - 1/2 (H) × 3 - 1/4 (D) in.]
Weight	440 g (1.0 lbs)

Note:

- The specifications and design are subject to change without prior notice. Products purchased may differ in details from illustrations in this manual.

● AVD-W6210/EW

General

Power source	14.4 V DC (10.8 — 15.1 V × allowed)
Grounding system	Negative type
Max. current consumption	1.5 A
Backup current	1 mA or less

Display Unit

Screen size/Aspect ratio	6.5 inch wide/16:9 (effective display area: 154 × 87 mm)
Pixels	336,960 (1,440 × 234)
Type	TFT active matrix, transmissive type
Color system	NTSC/PAL compatible
Operating temperature range	−10 — +50 °C
Storage temperature range	−20 — +80 °C
Built-in Speaker	ø 36 mm
Dimensions	188 (W) × 114 (H) × 37 (D) mm
Weight	467 g

Hide-away Unit

External video input level	1 Vp-p/75 Ω
External audio input level	1 V/22 kΩ
Max. output impedance	1 Vp-p/75 Ω
External audio max. output level	1 V/1 kΩ
Dimensions	162 (W) × 38 (H) × 85 (D) mm (excluding protruding parts)
Weight	440g

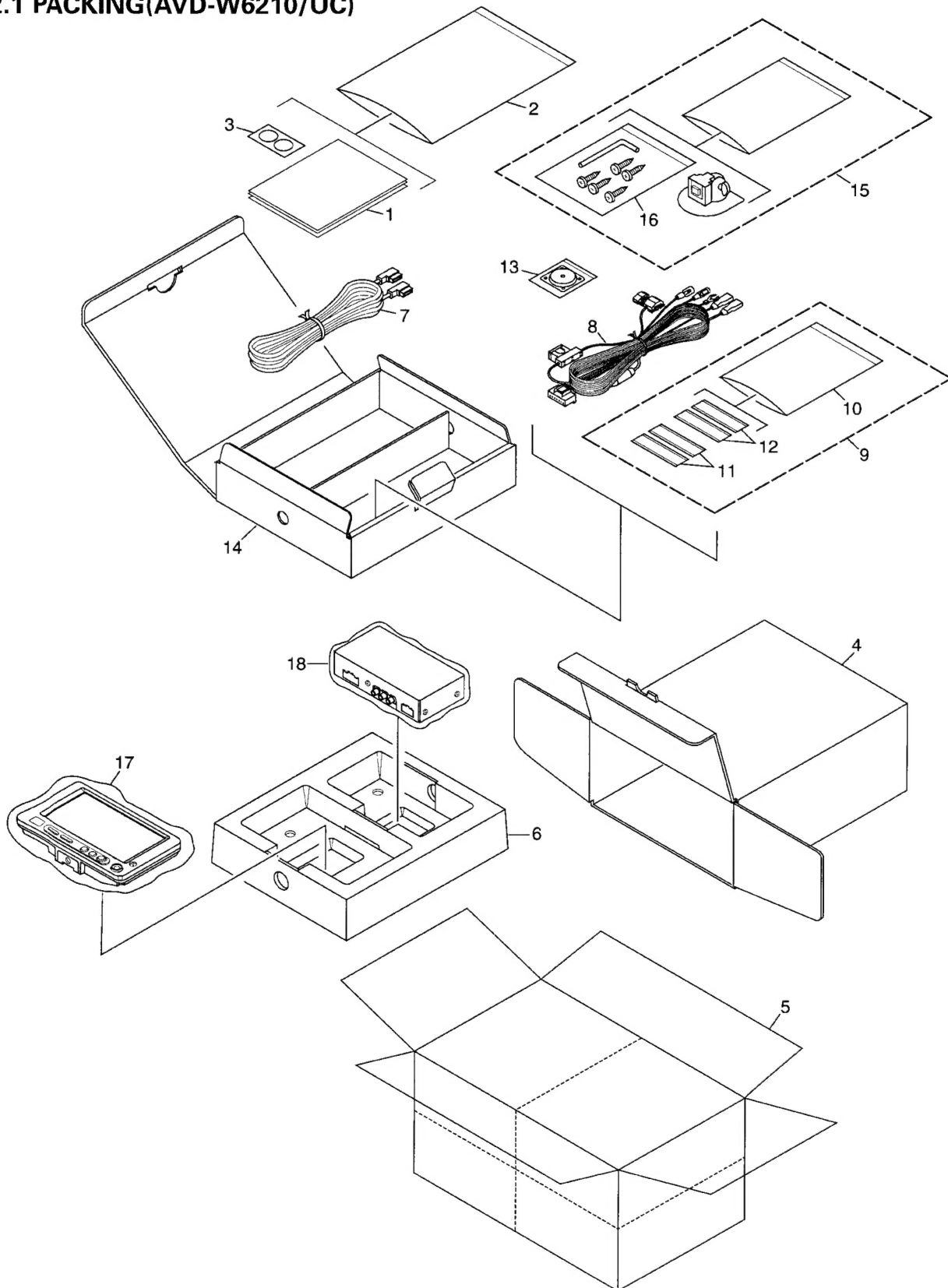
Note:

- The specifications and design are subject to change without prior notice. Products purchased may differ in details from illustrations in this manual.

2. EXPLODED VIEWS AND PARTS LIST

A

2.1 PACKING(AVD-W6210/UC)



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NOTE:

- Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.
- For the applying amount of lubricants or glue, follow the instructions in this manual.
(In the case of no amount instructions, apply as you think it appropriate.)

● PACKING(AVD-W6210/UC) SECTION PARTS LIST

Mark	No.	Description	Part No.
*	1-1	Card	ARY1048
	1-2	Owner's Manual	CRD3800
*	2	Polyethylene Bag	CEG1116
	3	Cushion	CNM4680
	4	Carton	CHG5104
	5	Contain Box	CHL5104
	6	Protector	CHP2724
	7	Cord Assy	CDE7284
	8	Cord Assy	CDE7286
	9	Accessory Assy	CEA2657
*	10	Polyethylene Bag	CEG1101
	11	Fastener	CNM6888
	12	Fastener	CNM6889
	13	Bracket Assy	CEA3745
	14	Sub Carton	CHG5105
	15	Monitor Stand Assy	CXC1137
	16	Screw Assy	CZE3078
	17	Polyethylene Bag	CEG1319
*	18	Polyethylene Bag	CEG-186

● Owner's Manual

Part No.	Language
CRD3800	English, French

A

2.2 PACKING(AVD-W6210/EW)

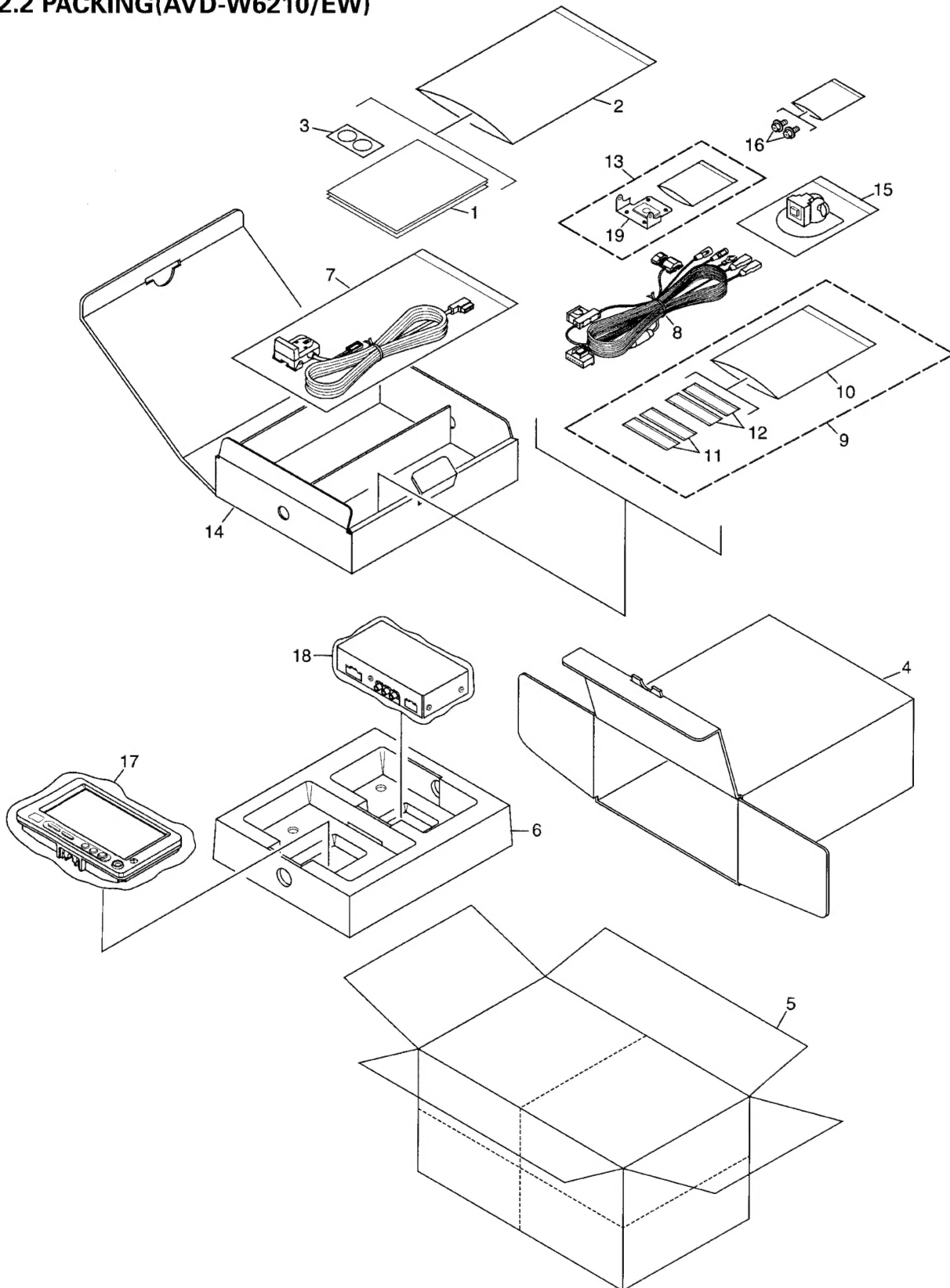
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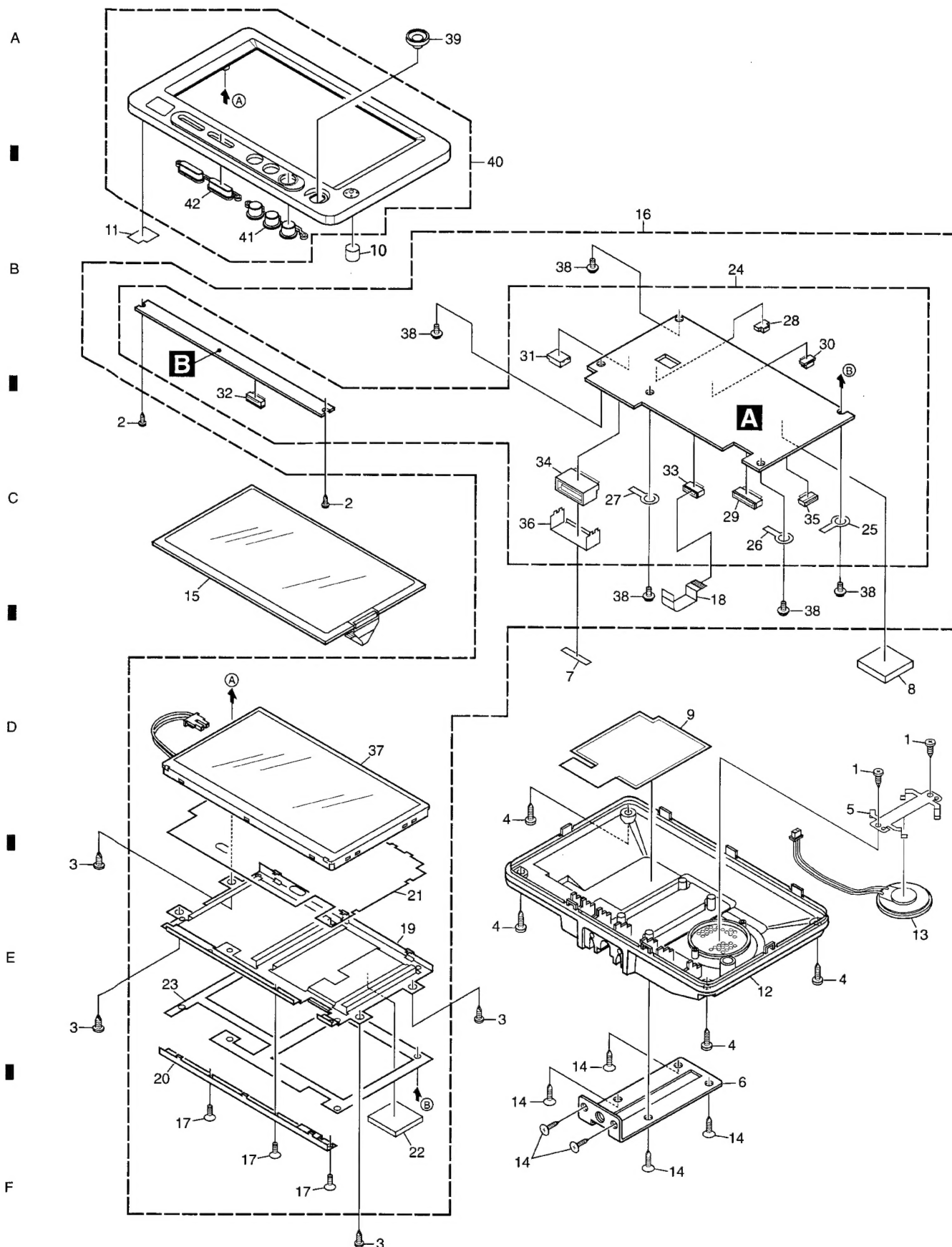
● PACKING(AVD-W6210/EW) SECTION PARTS LIST

Mark No.	Description	Part No.
* 1-1	Warranty Card	CRY1157
1-2	Owner's Manual	CRD3798
1-3	Owner's Manual	CRD3799
* 2	Polyethylene Bag	CEG1116
3	Cushion	CNM4680
4	Carton	CHG5103
5	Contain Box	CHL5103
6	Protector	CHP2724
7	Detach Assy	CXC2019
8	Cord Assy	CDE7286
9	Accessory Assy	CEA2657
* 10	Polyethylene Bag	CEG1101
11	Fastener	CNM6888
12	Fastener	CNM6889
13	Bracket Assy	CEA2823
14	Sub Carton	CHG5105
15	Monitor Stand Assy	CXB3629
16	Screw	HMB40P060FZK
17	Polyethylene Bag	CEG1319
* 18	Polyethylene Bag	CEG-186
19	Bracket	CNC7617

● Owner's Manual

Part No.	Language
CRD3798	English, Spanish, German
CRD3799	French, Italian, Dutch

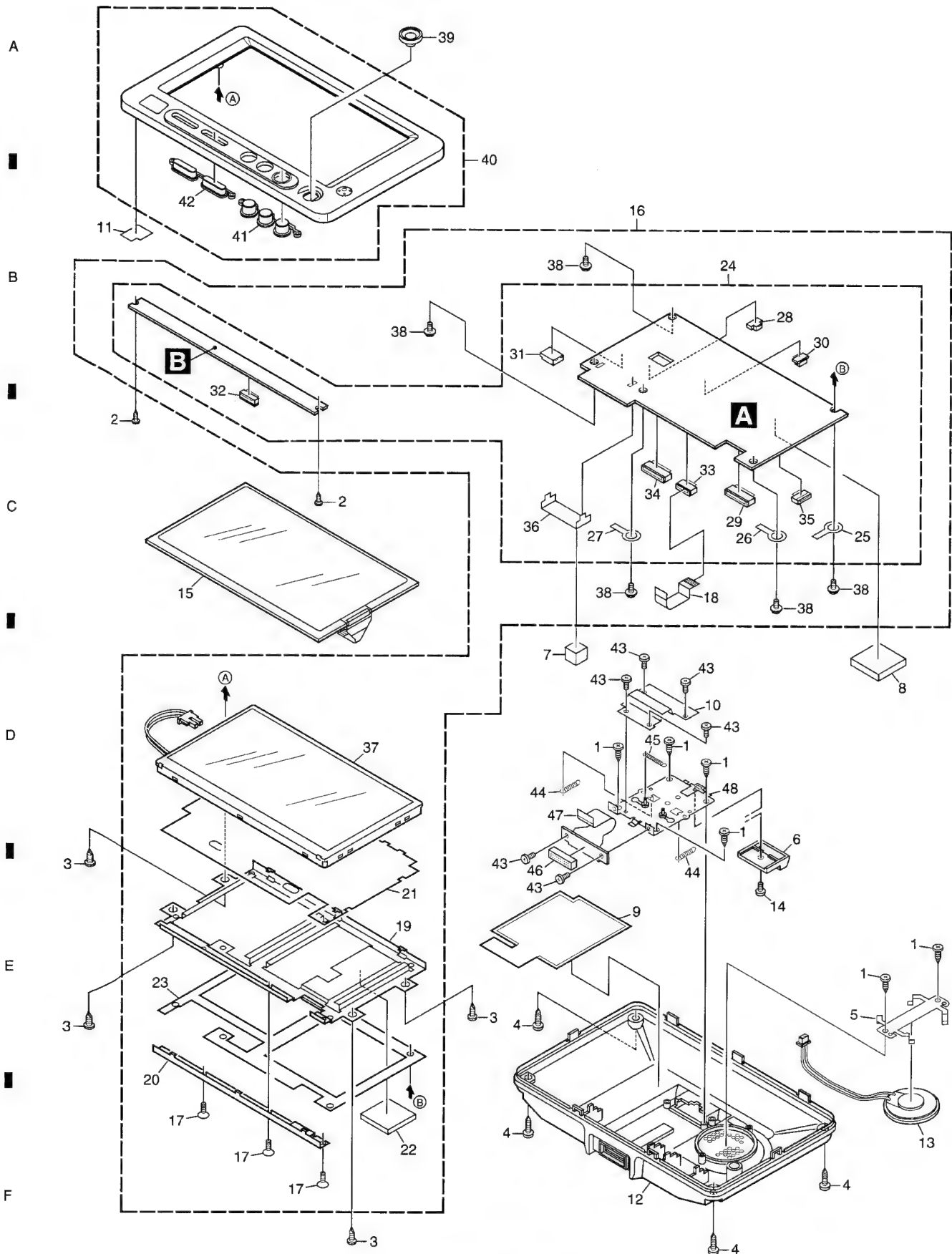
2.3 EXTERIOR(1)(AVD-W6210/UC)



● EXTERIOR(1)(AVD-W6210/UC) SECTION PARTS LIST

Mark No.	Description	Part No.
1	Screw	BPZ20P050FTC
2	Screw	BPZ20P050FZK
3	Screw	BPZ20P080FTC
4	Screw	BPZ20P100FZK
5	Holder	CNC7283
6	Bracket	CNC8398
7	Gasket	CNM7413
8	Sheet	CNM8339
9	Shield	CNM8417
10	Cushion	CNM8438
11	Shield	CNM8442
12	Case	CNS7541
13	Speaker	CPV1061
14	Screw	CPZ26P100FZK
15	Touch Panel	CSX1056
16	LCD Assy	CXC1366
17	Screw(M2x2)	CBA1551
18	FFC	CDE7108
19	Holder	CND1315
20	Holder	CND1316
21	Insulator	CNM8031
22	Sheet	CNM8338
23	Insulator	CNM8456
24	Monitor Unit	CWM8887
25	Terminal(CN4001)	CKF1064
26	Terminal(CN4003)	CKF1064
27	Terminal(CN4443)	CKF1064
28	Connector(CN4202)	CKS3124
29	Connector(CN4801)	CKS3991
30	Connector(CN4006)	CKS4402
31	Connector(CN4442)	CKS4428
32	Connector(CN4471)	CKS4449
33	Connector(CN4004)	CKS4511
34	Connector(CN4201)	CKS4647
35	Connector(CN4681)	CKS4675
36	Holder	CND1317
37	LCD Panel	CWX2671
38	Screw	IMS20P050FTC
39	Knob Unit	CXC1826
40	Grille Unit	CXC1827
*	41 Button	CAC8117
*	42 Button	CAC8118

2.4 EXTERIOR(1)(AVD-W6210/EW)

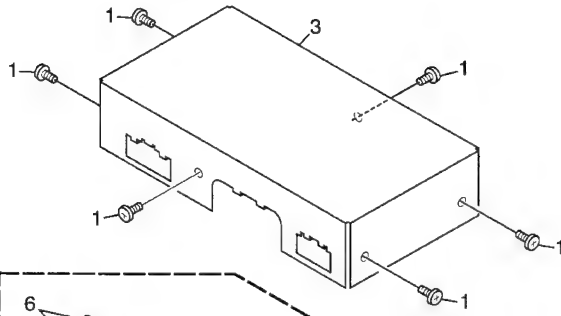


● EXTERIOR(1)(AVD-W6210/EW) SECTION PARTS LIST

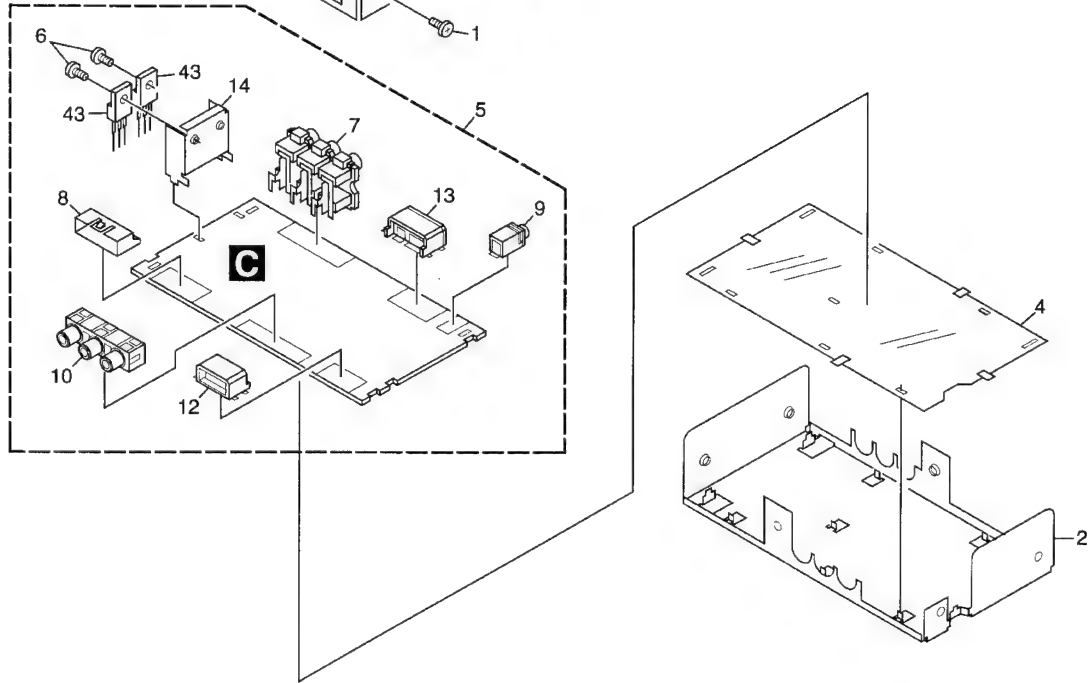
Mark No.	Description	Part No.
1	Screw	BPZ20P050FTC
2	Screw	BPZ20P050FZK
3	Screw	BPZ20P080FTC
4	Screw	BPZ20P100FZK
5	Holder	CNC7283
6	Knob	CAC5540
7	Gasket	CNM8439
8	Sheet	CNM8339
9	Shield	CNM8417
10	Cover	CNM7159
11	Shield	CNM8442
12	Case	CNS7557
13	Speaker	CPV1061
14	Screw(M2x3)	CBA1082
15	Touch Panel	CSX1056
16	LCD Assy	CXC1264
17	Screw(M2x2)	CBA1551
18	FFC	CDE7108
19	Holder	CND1315
20	Holder	CND1316
21	Insulator	CNM8031
22	Sheet	CNM8338
23	Insulator	CNM8456
24	Monitor Unit	CWM8852
25	Terminal(CN4001)	CKF1064
26	Terminal(CN4003)	CKF1064
27	Terminal(CN4443)	CKF1064
28	Connector(CN4202)	CKS3124
29	Connector(CN4801)	CKS3991
30	Connector(CN4006)	CKS4402
31	Connector(CN4442)	CKS4428
32	Connector(CN4471)	CKS4449
33	Connector(CN4004)	CKS4511
34	Connector(CN4002)	CKS4281
35	Connector(CN4681)	CKS4675
36	Holder	CND1791
37	LCD Panel	CWX2671
38	Screw	IMS20P050FTC
39	Knob Unit	CXC1826
40	Grille Unit	CXC1827
* 41	Button	CAC8117
* 42	Button	CAC8118
43	Screw(M2x3)	CBA1154
44	Spring	CBH1708
45	Spring	CBH2094
46	Connector	CKS3765
47	PCB	CNP7278
48	Slider Unit	CXB2312

2.5 EXTERIOR(2)

A

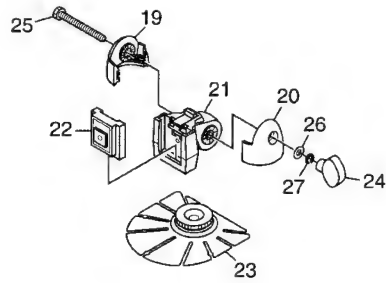


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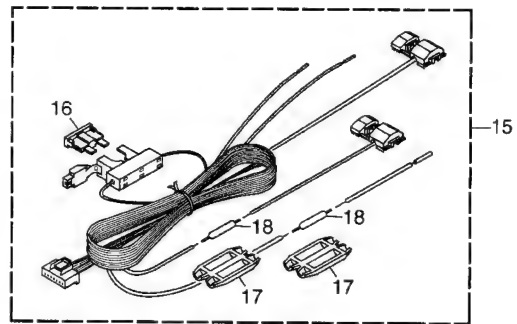


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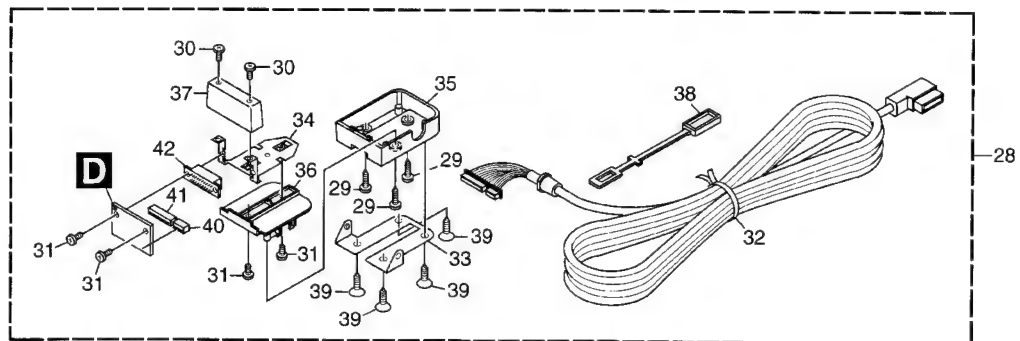
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E



F



(1) EXTERIOR(2) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BSZ30P060FTC	26	Washer	See Contrast table(2)
2	Chassis	CNA2648	27	Washer	See Contrast table(2)
3	Case	CNB2867	28	Detach Assy	See Contrast table(2)
4	Insulator	CNM8281	29	Screw	See Contrast table(2)
5	Mother Unit	CWM8853	30	Screw(M2x3)	See Contrast table(2)
6	Screw	BMZ30P060FTC	31	Screw(M2x4.5)	See Contrast table(2)
7	Pin Jack(CN1301)	CKB1060	32	Cord Assy	See Contrast table(2)
8	Plug(CN1801)	CKM1134	33	Bracket	See Contrast table(2)
9	Jack(CN1201)	CKN1032	34	Bracket	See Contrast table(2)
10	Pin Jack(CN1101)	CKS2918	35	Case	See Contrast table(2)
11		36	Cover	See Contrast table(2)
12	Connector(CN1321)	CKS4497	37	Cover	See Contrast table(2)
13	Connector(CN1841)	CKS4647	38	Cover	See Contrast table(2)
14	Holder	CND1758	39	Screw	See Contrast table(2)
15	Cord Assy	CDE7286	40	Plug(CN2002)	See Contrast table(2)
16	Fuse(4A)	CEK1001	41	Plug(CN2003)	See Contrast table(2)
17	Cap	CNS1472	* 42	Connector(CN2001)	See Contrast table(2)
18	Resistor	RS1/2P102JL	43	Transistor(Q1823,1831)	2SD2375
19	Holder(B)-L	See Contrast table(2)			
20	Holder(B)-R	See Contrast table(2)			
21	Holder Unit	See Contrast table(2)			
22	Guide Holder Unit	See Contrast table(2)			
23	Base Plate Unit	See Contrast table(2)			
24	Knob Unit	See Contrast table(2)			
25	Bolt	See Contrast table(2)			

(2) CONTRAST TABLE

AVD-W6210/UC and AVD-W6210/EW are constructed the same except for the following:

Mark No.	Symbol and Description	Part No.	
		AVD-W6210/UC	AVD-W6210/EW
19	Holder(B)-L	CZN5455	Not used
20	Holder(B)-R	CZN5456	Not used
21	Holder Unit	CZX5044	Not used
22	Guide Holder Unit	CZX5045	Not used
23	Base Plate Unit	CZX5046	Not used
24	Knob Unit	CZX5047	Not used
25	Bolt	HMZ50Z450FZK	Not used
26	Washer	WC50FZK	Not used
27	Washer	WS50FZK	Not used
28	Detach Assy	Not used	CXC2019
29	Screw	Not used	BPZ26P080FZK
30	Screw(M2x3)	Not used	CBA1082
31	Screw(M2x4.5)	Not used	CBA1083
32	Cord Assy	Not used	CDE7277
33	Bracket	Not used	CNC7510
34	Bracket	Not used	CNC7511
35	Case	Not used	CNS4816
36	Cover	Not used	CNS4883
37	Cover	Not used	CNS4884
38	Cover	Not used	CNV5716
39	Screw	Not used	CPZ26P080FZK
40	Plug(CN2002)	Not used	CKS3274
41	Plug(CN2003)	Not used	CKS3282
* 42	Connector(CN2001)	Not used	CKS3764

A

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

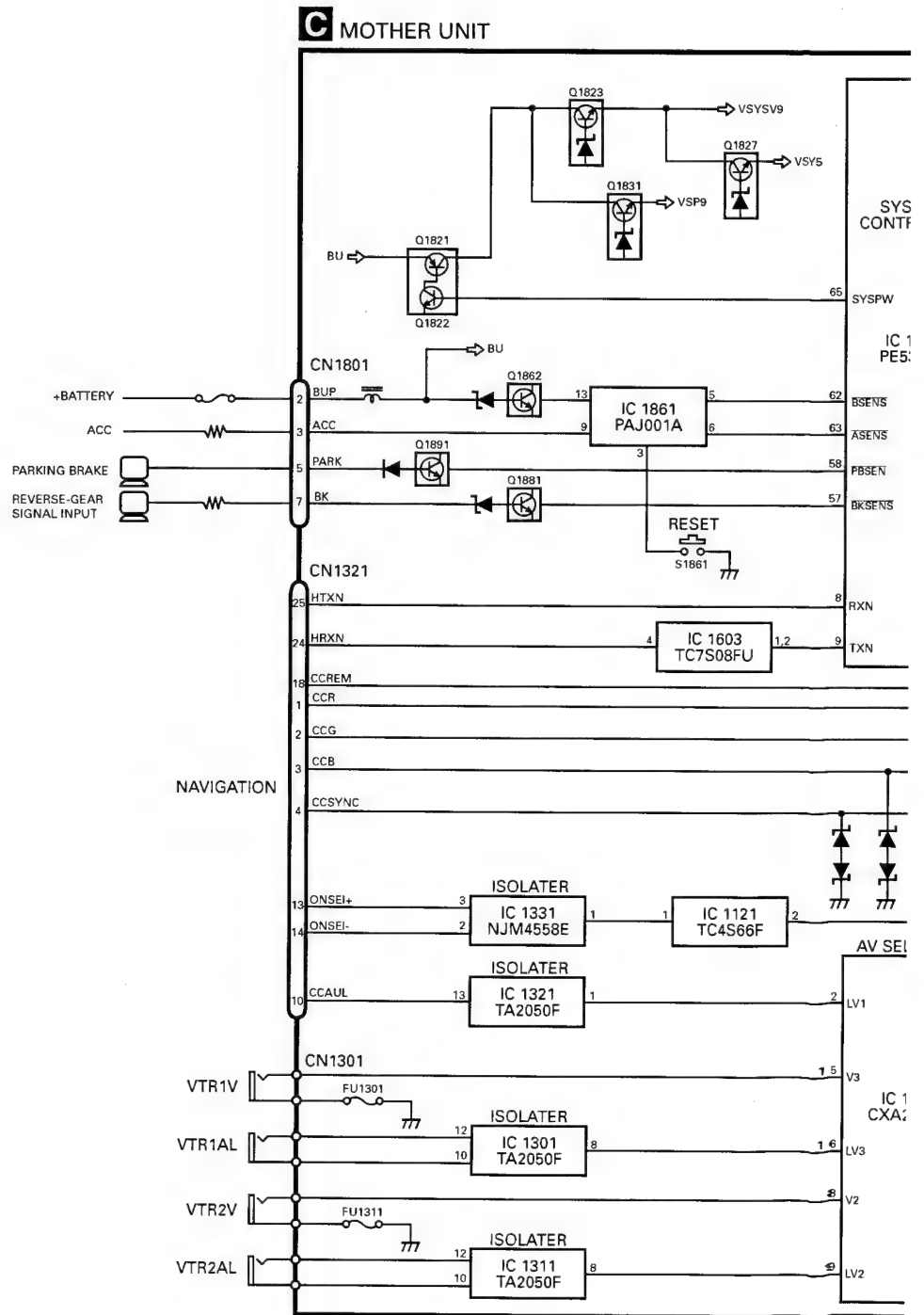
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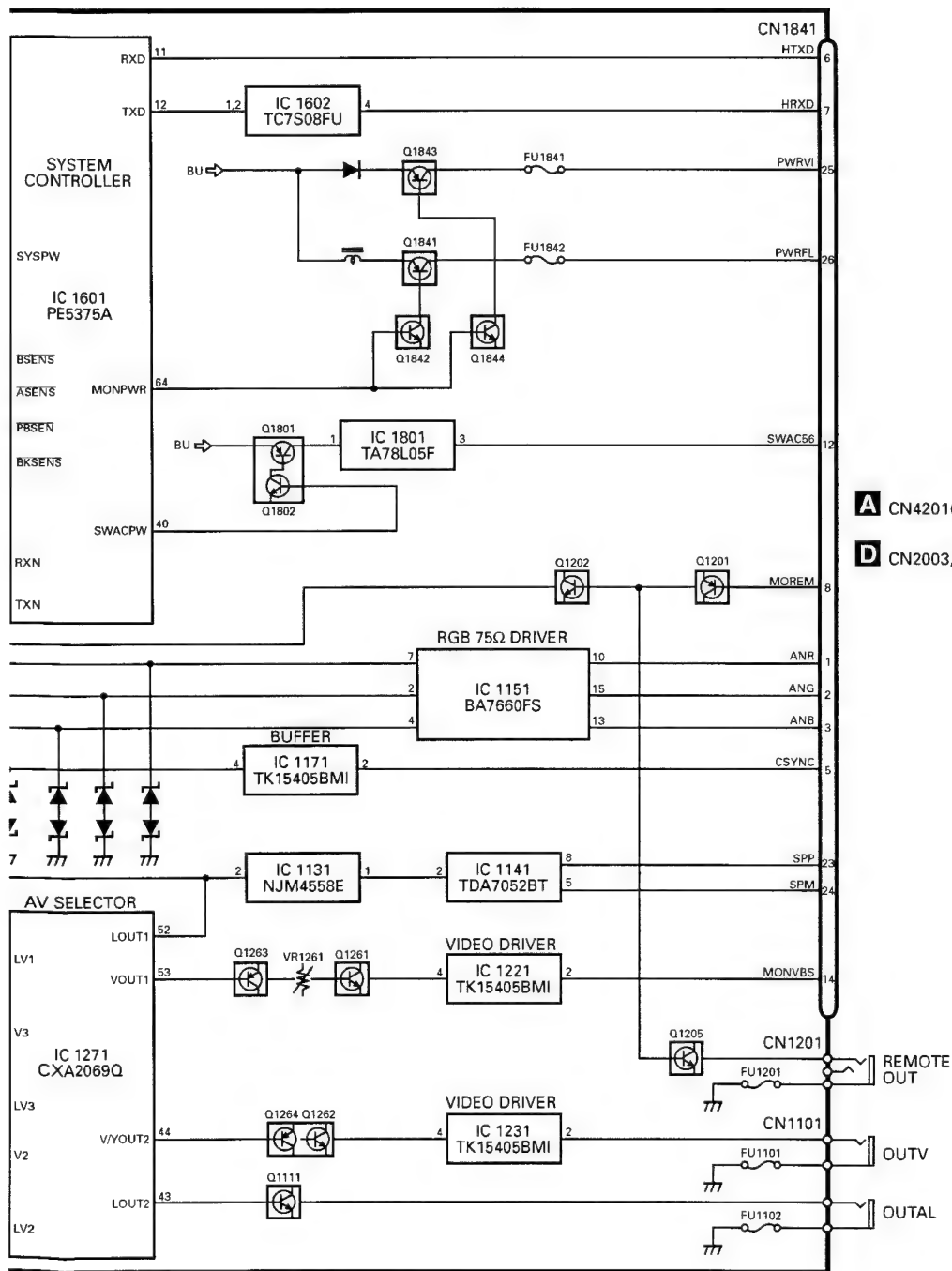
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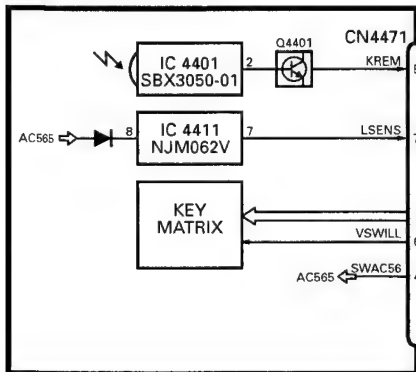


A CN4201(AVD-W6210/UC)

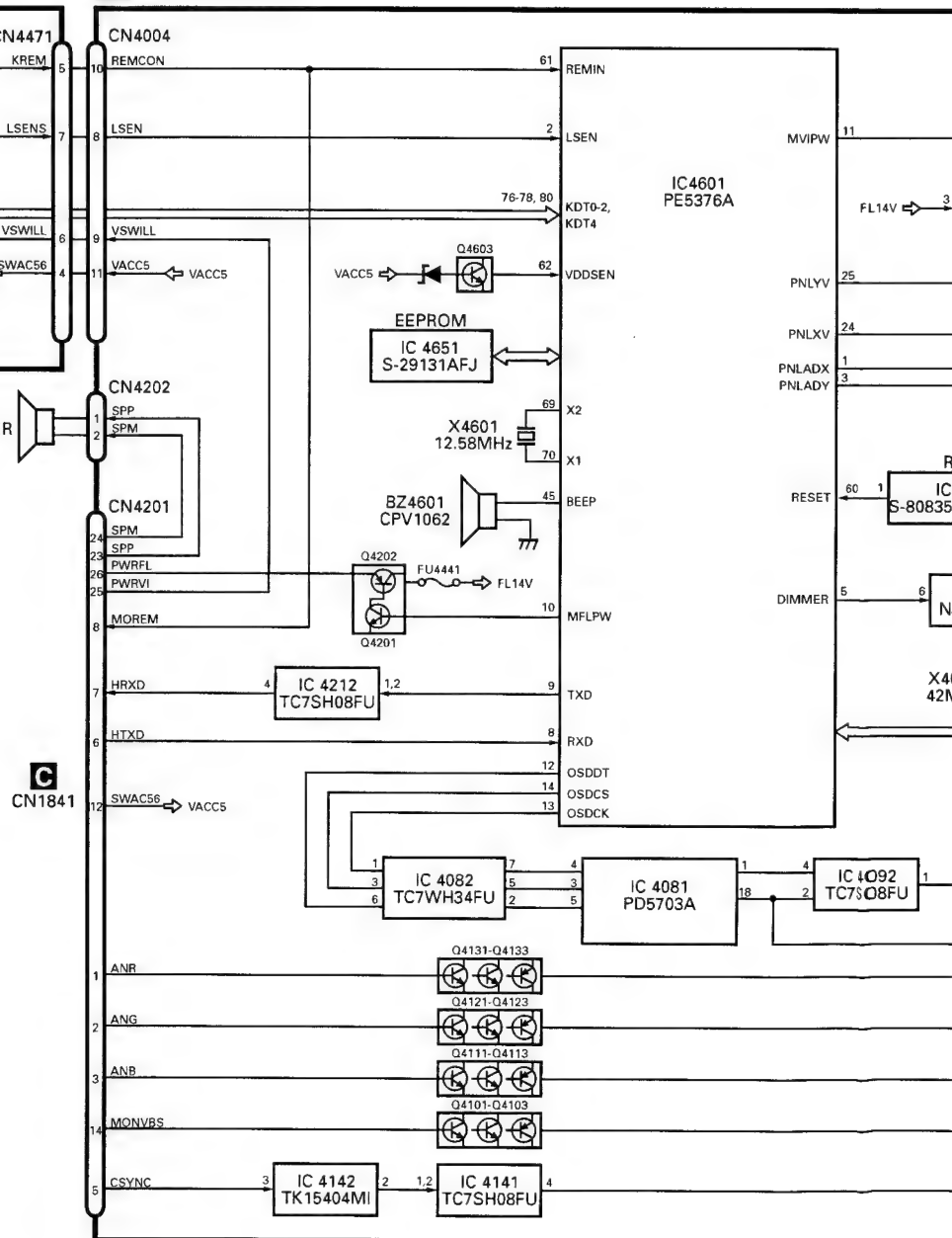
D CN2003, 2002(AVD-W6210/EW)

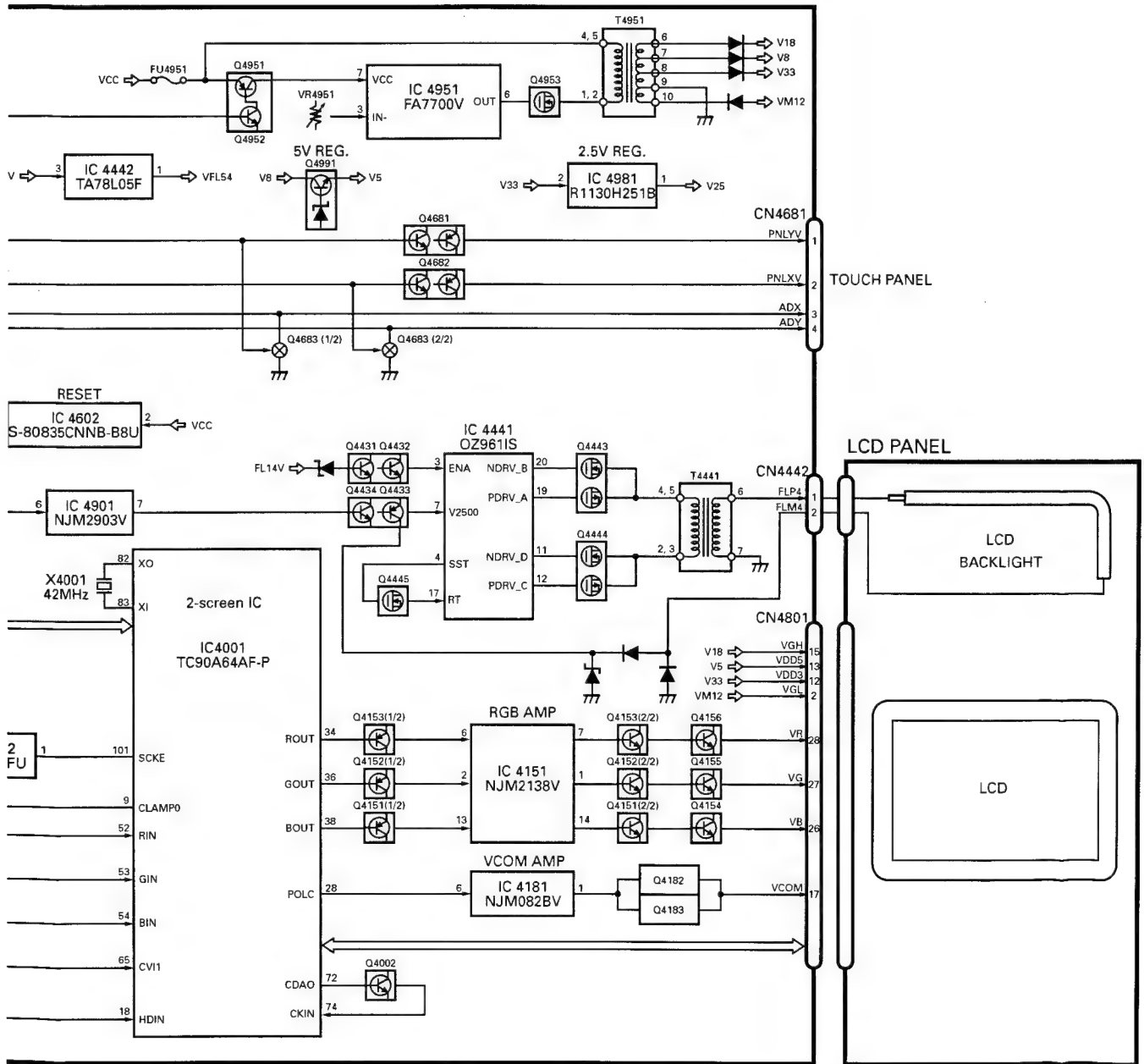
● AVD-W6210/UC

B KEYBOARD PCB



A MONITOR PCB





A

● AVD-W6210/EW

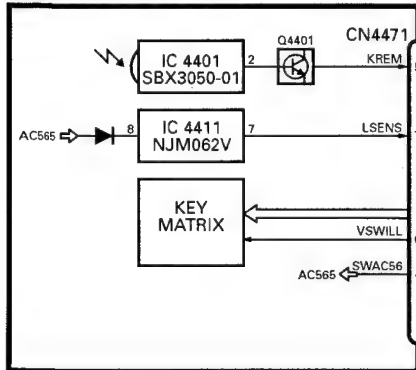
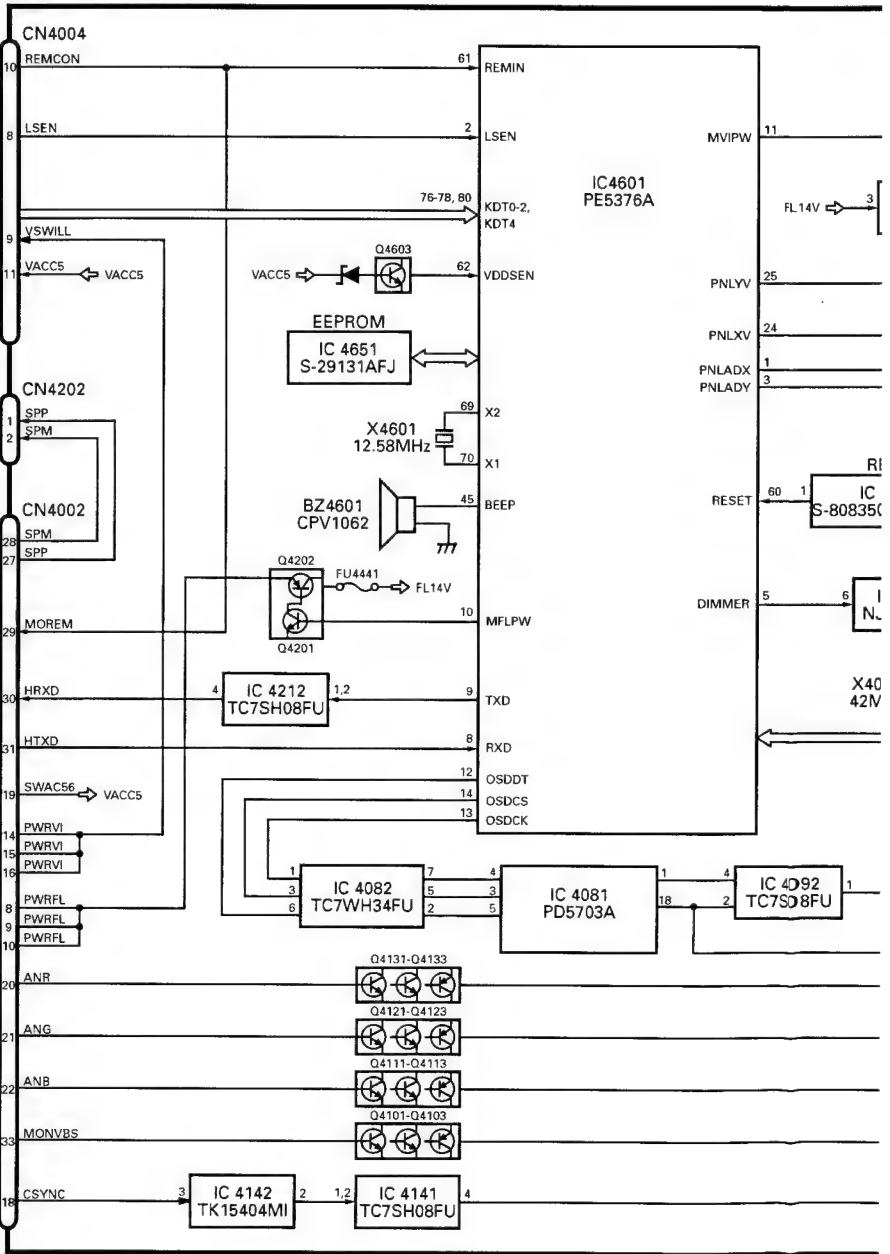
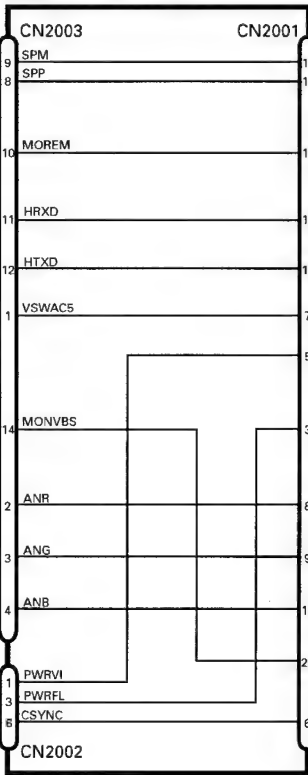
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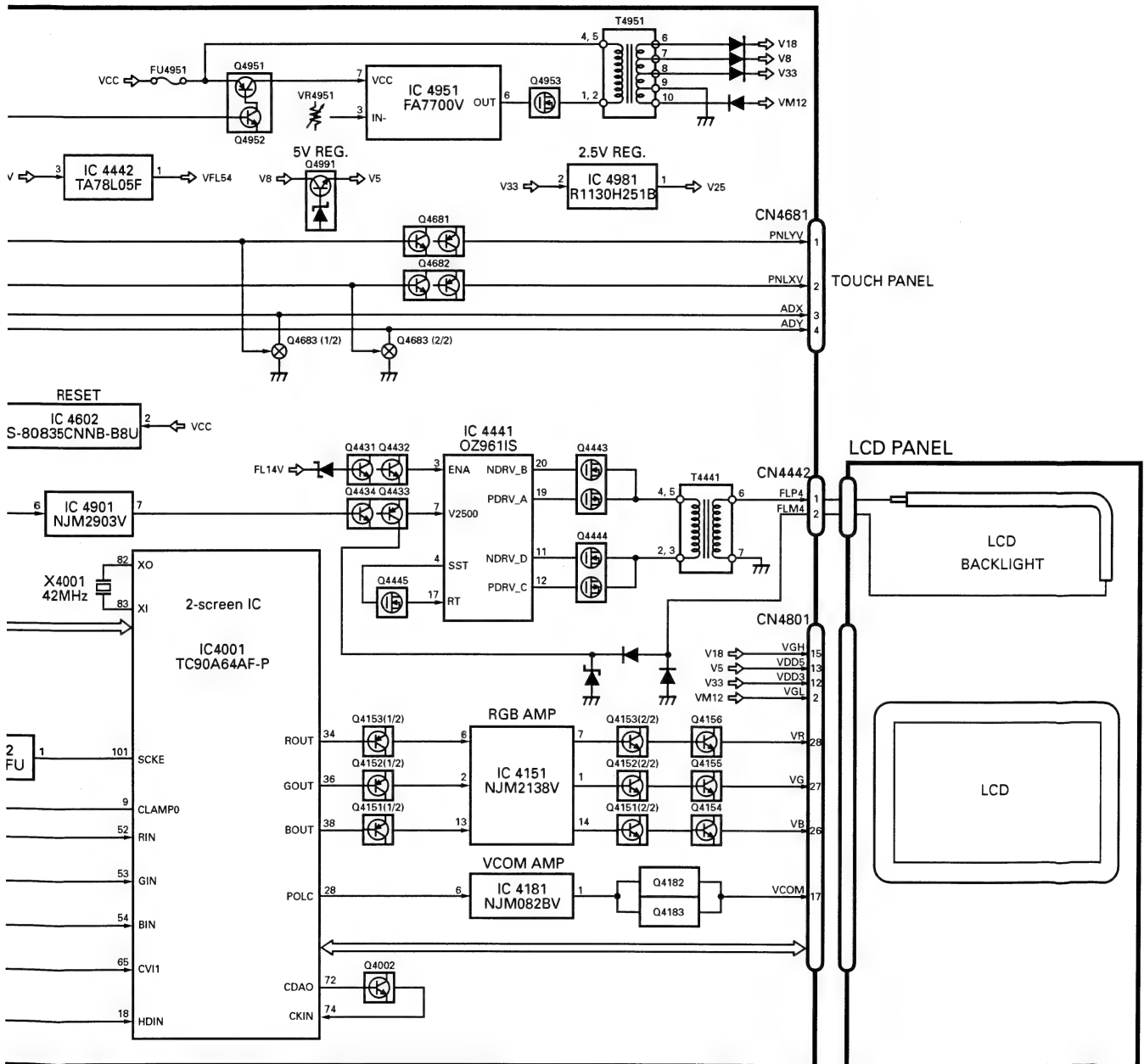
C

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F

B KEYBOARD PCB**A** MONITOR PCB**D** DETACH UNIT



3.2 MONITOR PCB (PICTURE PROCESSING)(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

A

B

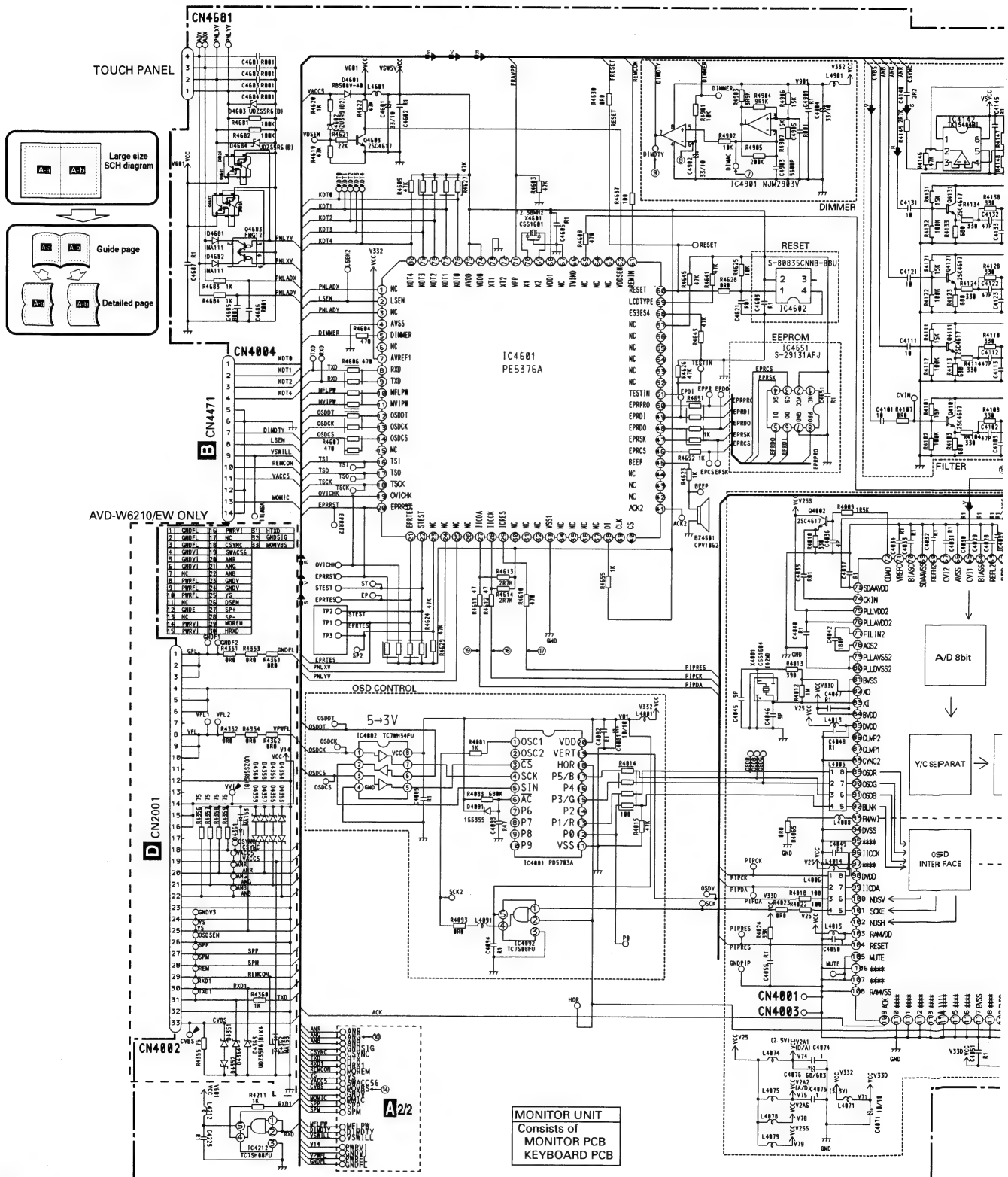
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A-a 1/2

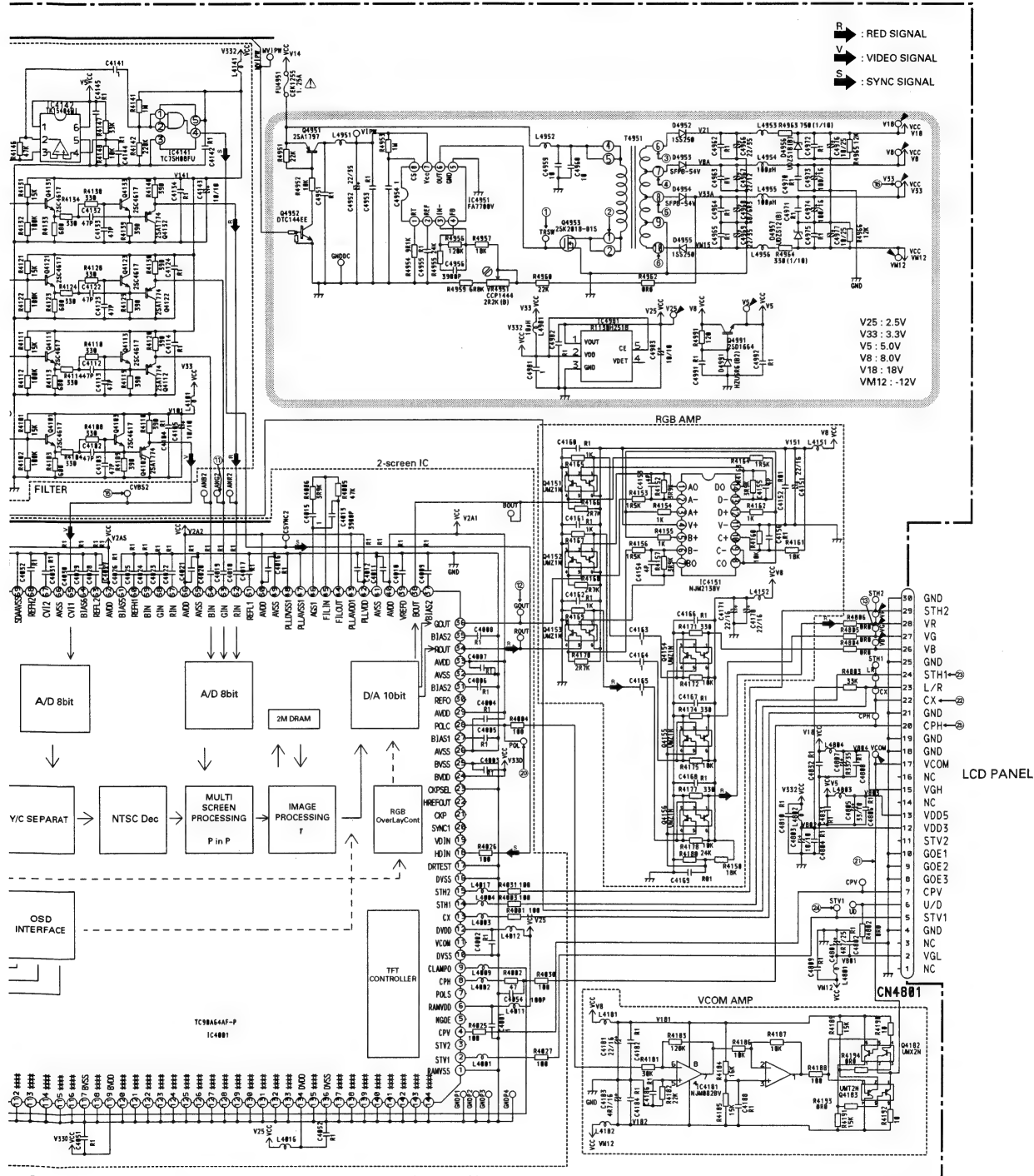


MONITOR UNIT
Consists of MONITOR PCB KEYBOARD PCB

A^{1/2}

A-b 1/2

A1/2 MONITOR PCB (PICTURE PROCESSING)



NOTE :

- Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
- ⊢ Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :

2.2 → 2R2

0.022 → R022

The mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

: The power supply is shown with the marked box.

A1/2 MONITOR PCB (PICTURE PROCESSING)

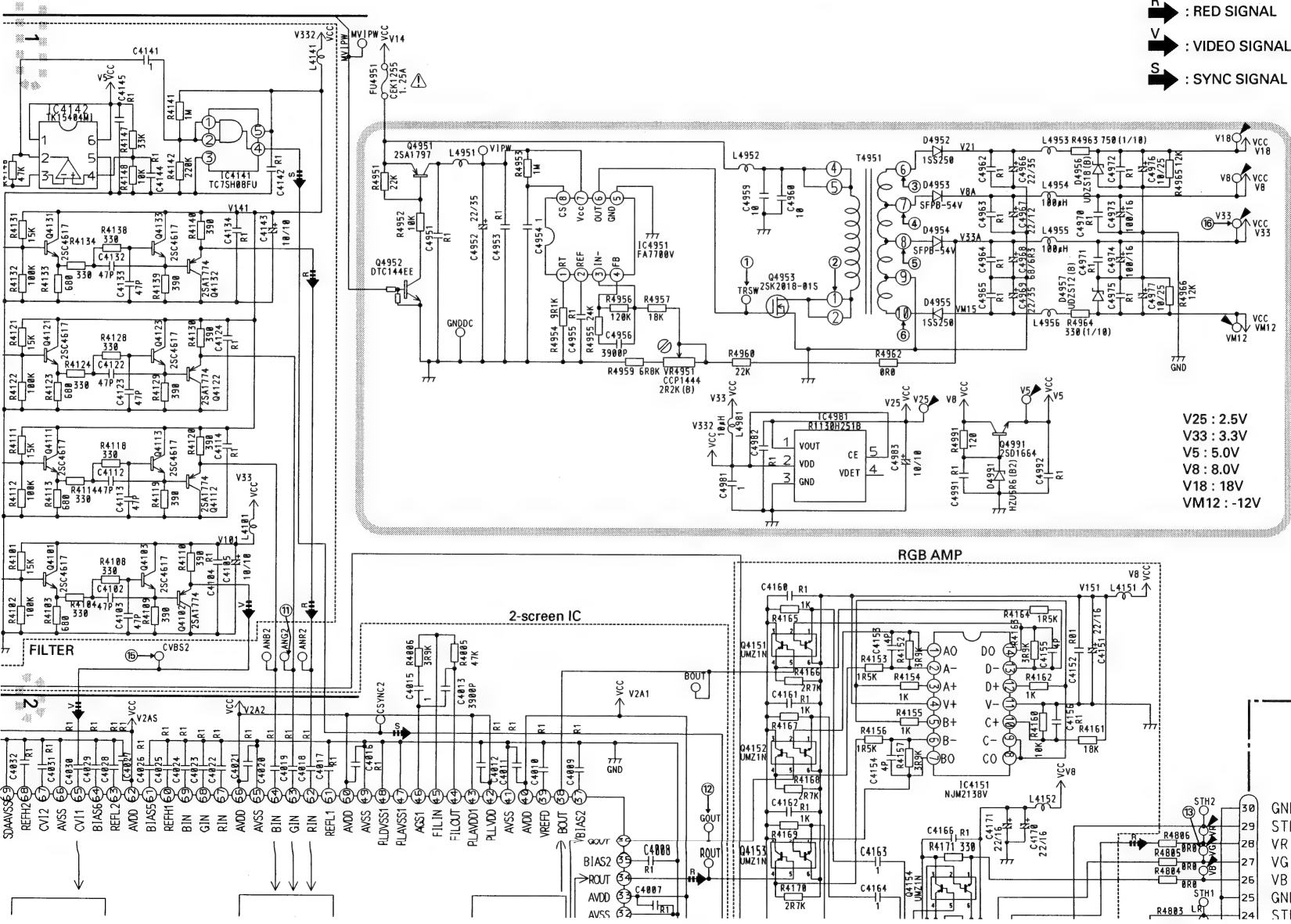
A-a (1/2) A-b (1/2)

R : RED SIGNAL
V : VIDEO SIGNAL
S : SYNC SIGNAL

V25 : 2.5V
V33 : 3.3V
V5 : 5.0V
V8 : 8.0V
V18 : 18V
VM12 : -12V

RGB AMP

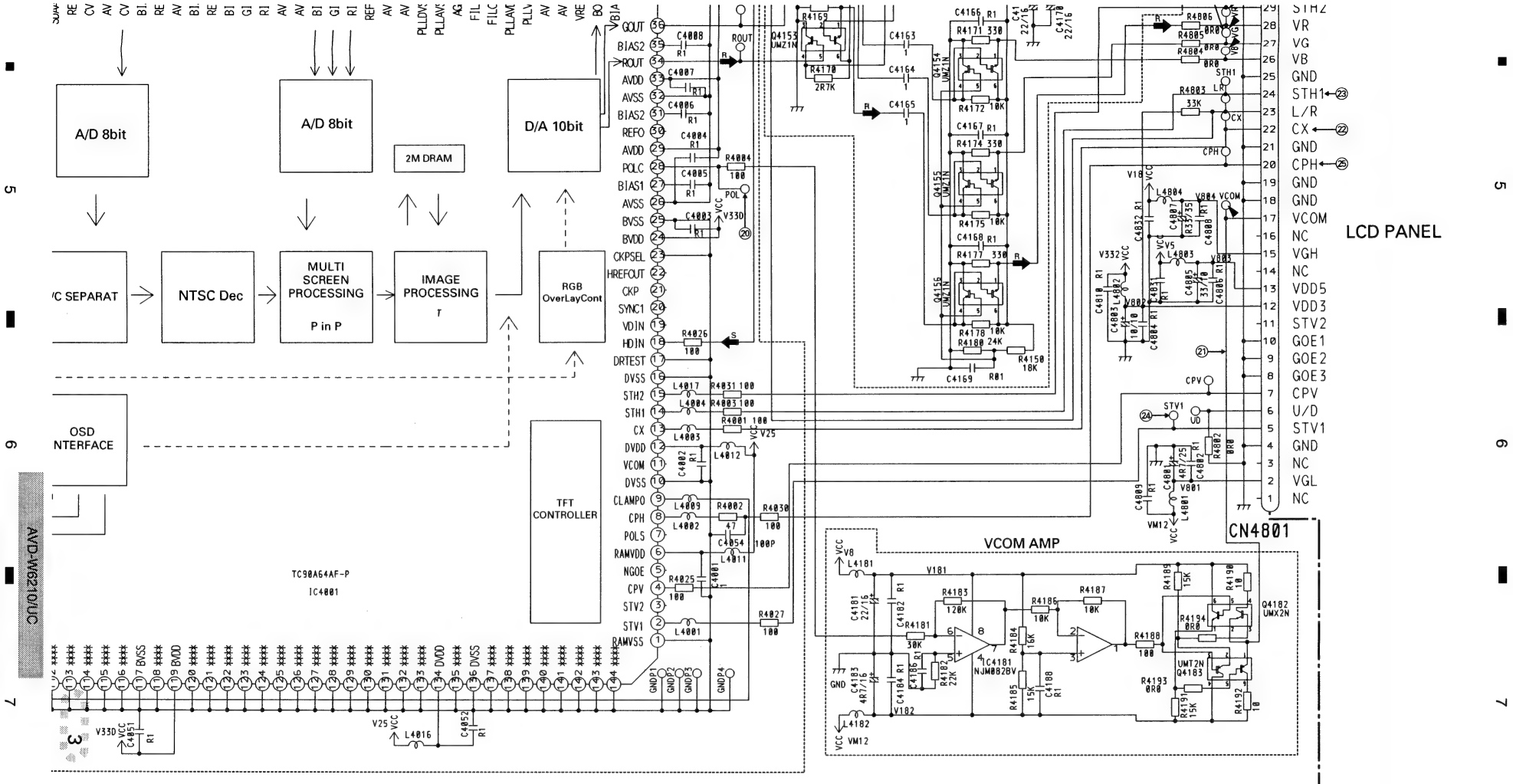
2-screen IC



30 GND
29 STH2
28 VR
27 VG
26 VB
25 GND
24 STH1

A-b 1/2

AMD-W6210/UC




NOTE :

- Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
- |— Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :
2.2 → 2R2
0.022 → R022

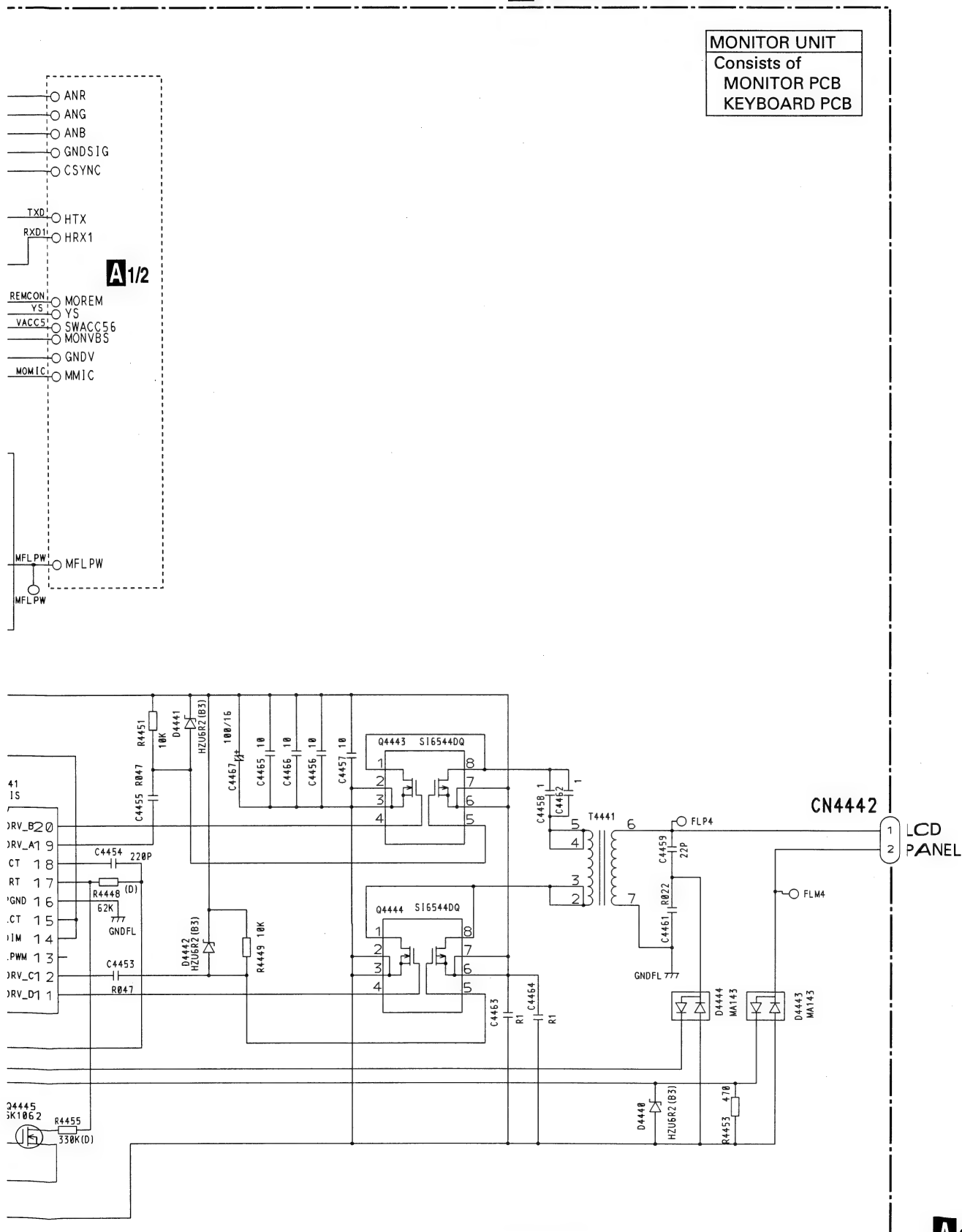
The Δ mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.

 : The power supply is shown with the marked box.

A 2/2



A2/2 MONITOR PCB (INVERTER)

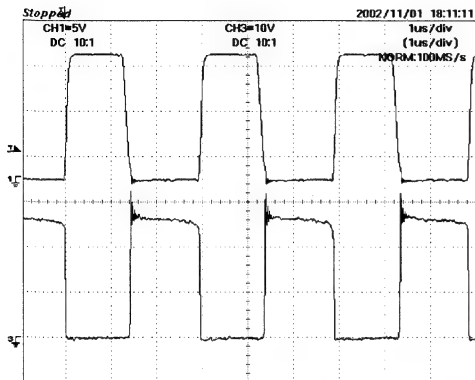


Waveforms

Note : The encircled numbers denote measuring pointes in circuit diagram.

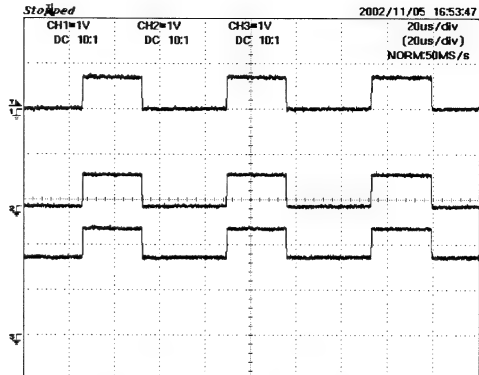
A

CH1 : ① TRSW CH2 : ② T4951 Pin 1



=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.00V Main : 1K Mode : AUTO
BW : FULL CH2 : 0.00V Zoom : 1K Type : EDGE CH1 f
CH3 : 0.0V Delay : 0.0ns
CH4 : 0.00V Hold Off : MINIMUM

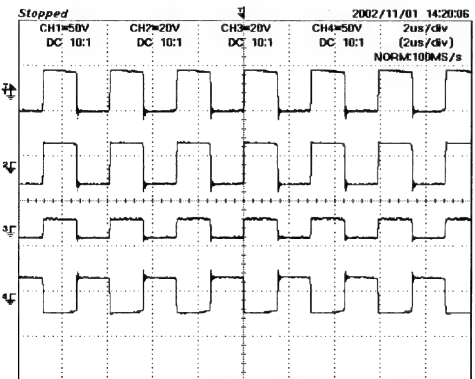
CH1 : Color bar G signal CH2 : ⑩ ANG
CH3 : ⑪ ANG2



=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.00V Main : 10K Mode : AUTO
BW : FULL CH2 : 0.00V Zoom : 10K Type : EDGE CH1 f
CH3 : 0.00V Delay : 0.0ns
CH4 : 0.00V Hold Off : 0.2us

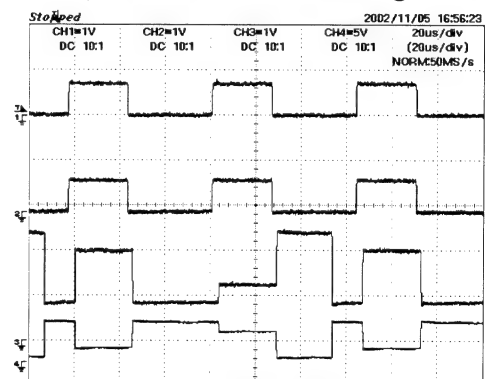
B

CH1 : ③ T4951 Pin 6 CH2 : ④ T4951 Pin 7
CH3 : ⑤ T4951 Pin 8 CH4 : ⑥ T4951 Pin 10



=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.0V Main : 2K Mode : AUTO
BW : 20MHz CH2 : 0.0V Zoom : 2K Type : EDGE CH1 f
CH3 : 0.0V Delay : 0.0ns
CH4 : 0.0V Hold Off : MINIMUM

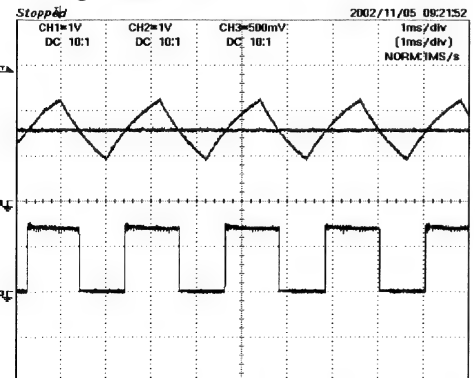
CH1 : Color bar G signal CH2 : ⑩ ANG
CH3 : ⑫ GOUT CH4 : ⑬ VG



=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.00V Main : 10K Mode : AUTO
BW : FULL CH2 : 0.00V Zoom : 10K Type : EDGE CH1 f
CH3 : 0.00V Delay : 0.0ns
CH4 : 0.00V Hold Off : 0.2us

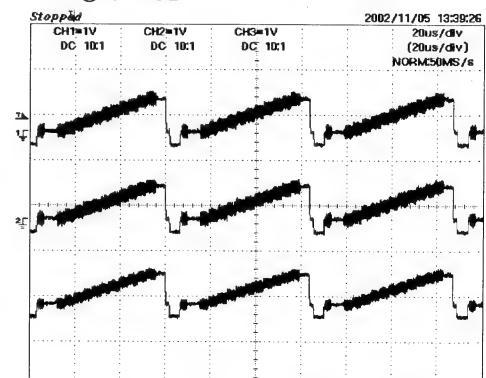
D

CH1 : ⑦ IC4901 Pin 2 CH2 : ⑧ IC4901 Pin 6
CH3 : ⑨ IC4901 Pin 7



=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.00V Main : 10K Mode : AUTO
BW : FULL CH2 : 0.00V Zoom : 10K Type : EDGE CH1 f
CH3 : 0.00V Delay : 0.0ns
CH4 : 0.00V Hold Off : MINIMUM

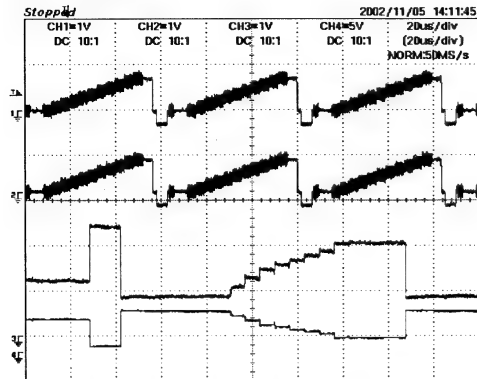
CH1 : 10 STEP VTR IN CH2 : ⑭ CVBS
CH3 : ⑮ CVBS2



=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.00V Main : 10K Mode : SINGLE
BW : FULL CH2 : 0.00V Zoom : 10K Type : EDGE CH1 f
CH3 : 0.00V Delay : 0.0ns
CH4 : 0.00V Hold Off : MINIMUM

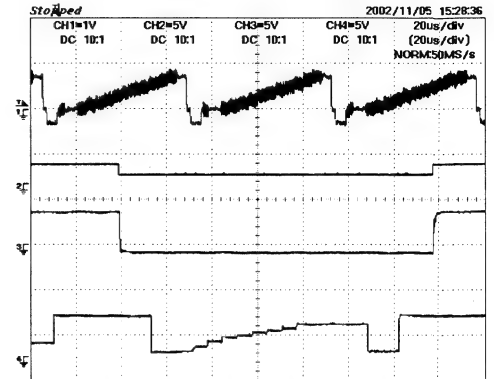
F

CH1: 10 STEP VTR IN CH2: ⑭ CVBS
CH3: ⑫ GOUT CH4: ⑬ VG



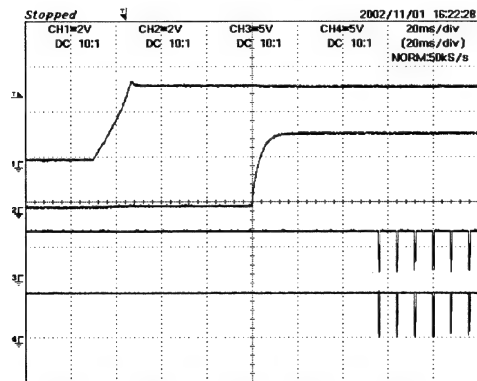
=Filter= =Offset= =Record Length= =Trigger=
Smoothing: ON CH1: 0.00V Main: 10K Mode: SINGLE
BW: FULL CH2: 0.00V Zoom: 10K Type: EDGE CH1 f
CH3: 0.00V Delay: 1.1ns
CH4: 0.00V Hold Off: 0.2us

CH1: 10 STEP VTR IN CH2: ⑳ POL
CH3: ㉑ VCOM CH4: ⑬ VG



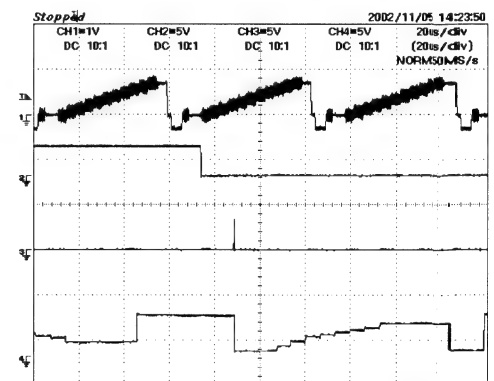
=Filter= =Offset= =Record Length= =Trigger=
Smoothing: ON CH1: 0.00V Main: 10K Mode: AUTO
BW: FULL CH2: 0.00V Zoom: 10K Type: EDGE CH1 f
CH3: 0.00V Delay: 0.0ns
CH4: 0.00V Hold Off: 0.2us

CH1: ⑯ V33 CH2: ⑰ PIPRES
CH3: ⑱ PIPCK CH4: ⑲ PIPDA



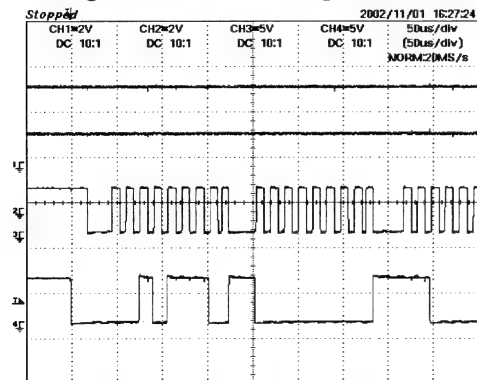
=Filter= =Offset= =Record Length= =Trigger=
Smoothing: ON CH1: 0.00V Main: 10K Mode: SINGLE
BW: FULL CH2: 0.00V Zoom: 10K Type: EDGE CH1 f
CH3: 0.00V Delay: 0.0ns
CH4: 0.00V Hold Off: MINIMUM

CH1: 10 STEP VTR IN CH2: ㉒ CX
CH3: ㉓ STH1 CH4: ⑬ VG



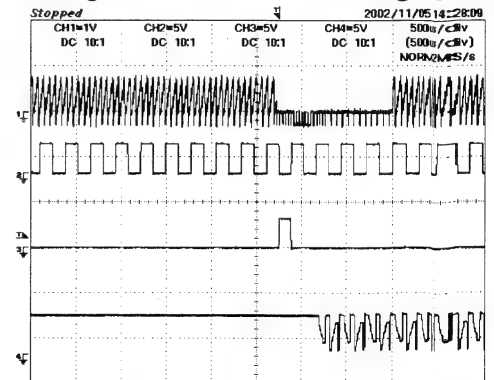
=Filter= =Offset= =Record Length= =Trigger=
Smoothing: ON CH1: 0.00V Main: 10K Mode: SINGLE
BW: FULL CH2: 0.00V Zoom: 10K Type: EDGE CH1 f
CH3: 0.00V Delay: 1.1ns
CH4: 0.00V Hold Off: 0.2us

CH1: ⑯ V33 CH2: ⑰ PIPRES
CH3: ⑱ PIPCK CH4: ⑲ PIPDA



=Filter= =Offset= =Record Length= =Trigger=
Smoothing: ON CH1: 0.00V Main: 10K Mode: SINGLE
BW: FULL CH2: 0.00V Zoom: 10K Type: EDGE CH4 f
CH3: 0.00V Delay: 0.0ns
CH4: 0.00V Hold Off: MINIMUM

CH1: 10 STEP VTR IN CH2: ㉒ CX
CH3: ㉔ STV1 CH4: ⑬ VG



=Filter= =Offset= =Record Length= =Trigger=
Smoothing: ON CH1: 0.00V Main: 10K Mode: SINGLE
BW: FULL CH2: 0.00V Zoom: 10K Type: EDGE CH3 f
CH3: 0.00V Delay: 0.0ns
CH4: 0.00V Hold Off: 0.2us

1

2

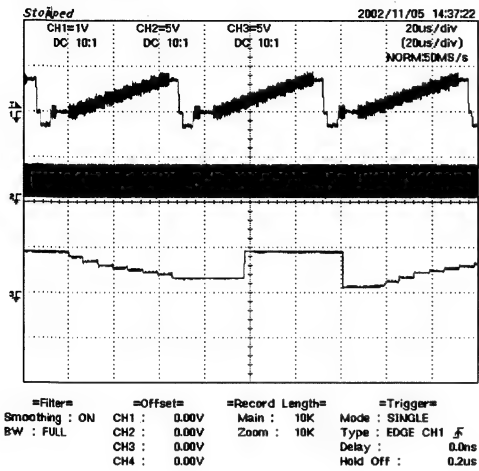
3

4

A

CH1 : 10 STEP VTR IN
CH3 : ⑬ VG

CH2 : ⑤ CPH



B

C

D

E

F

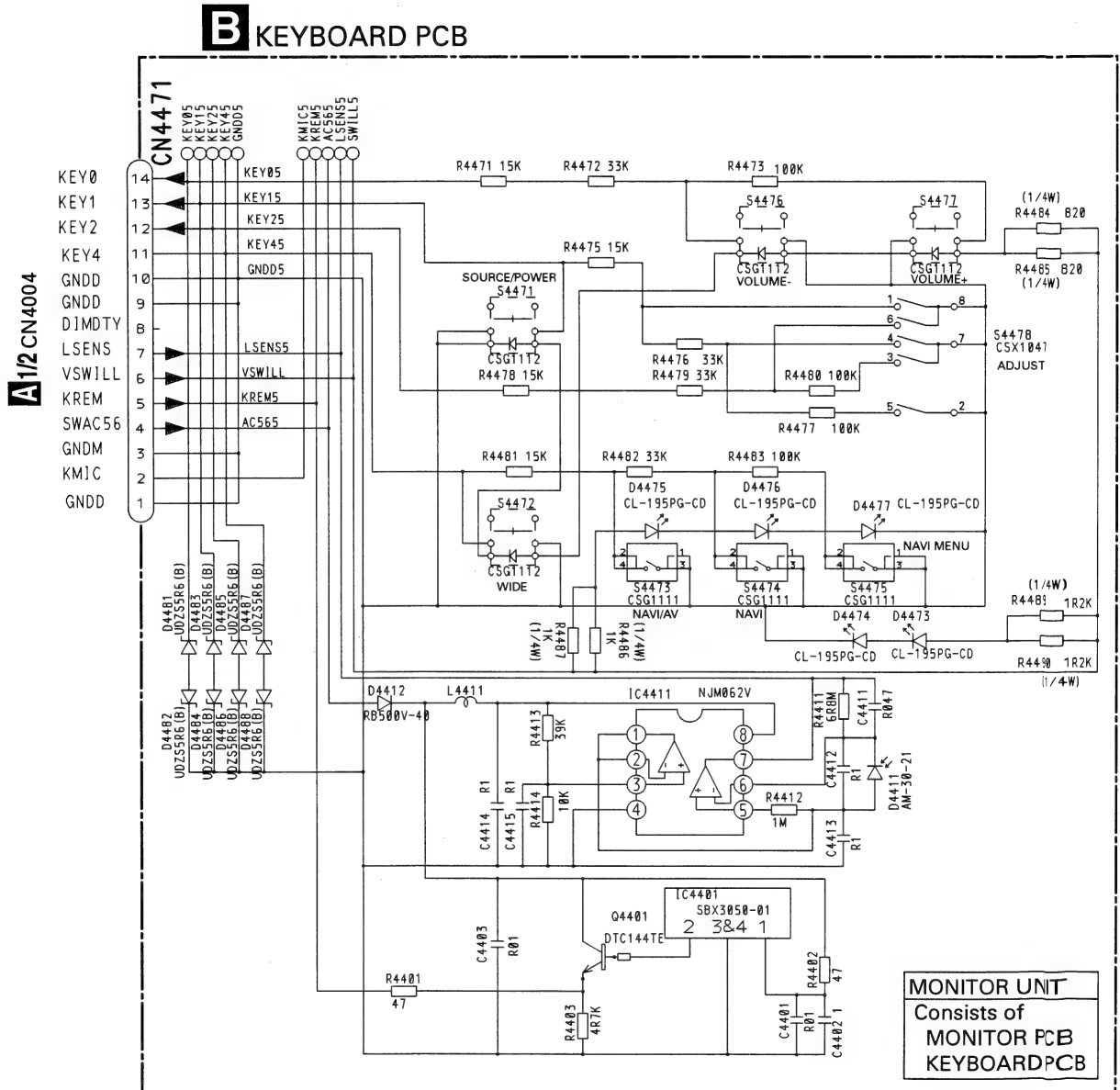
1

2

3

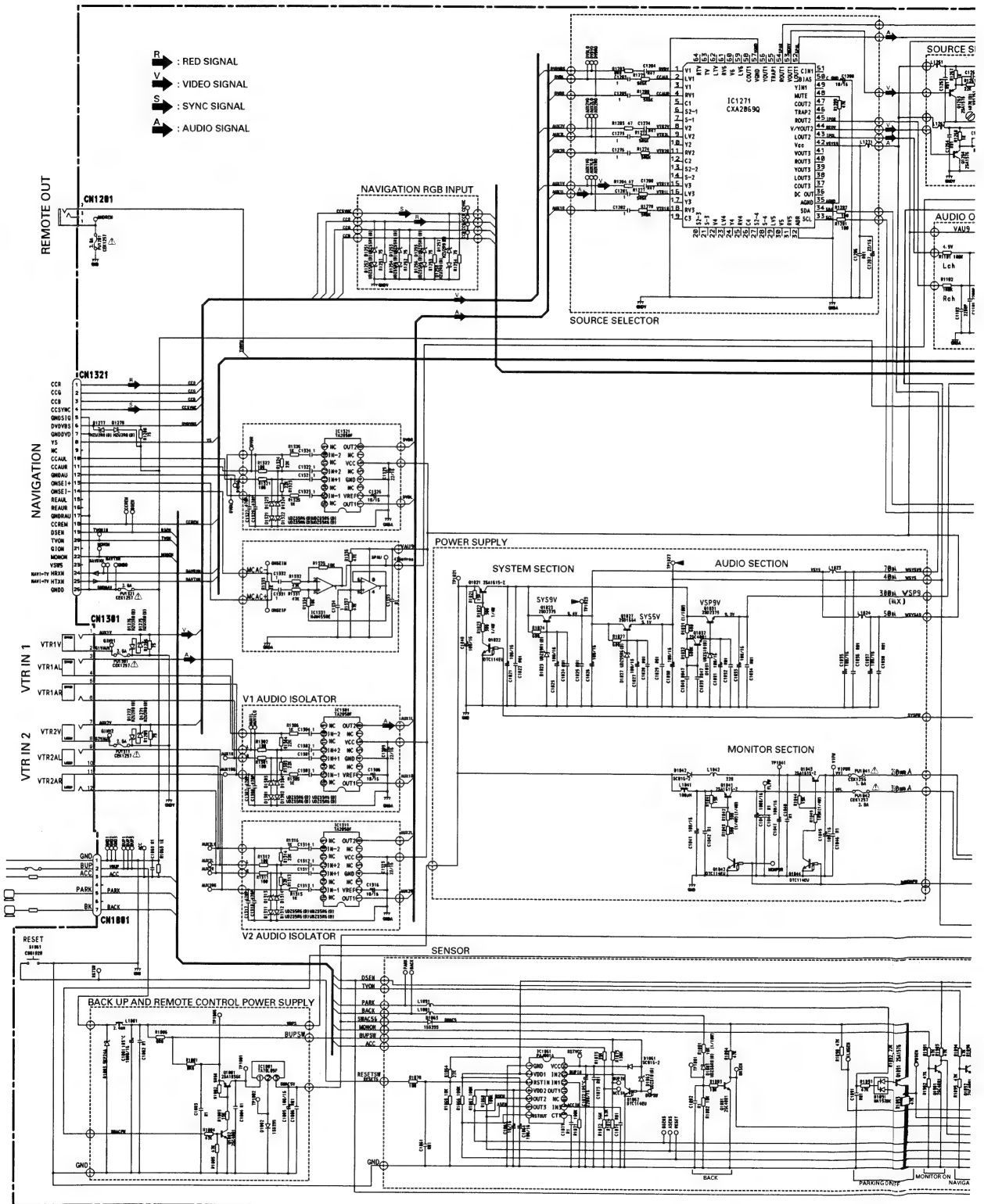
4

3.4 KEYBOARD PCB

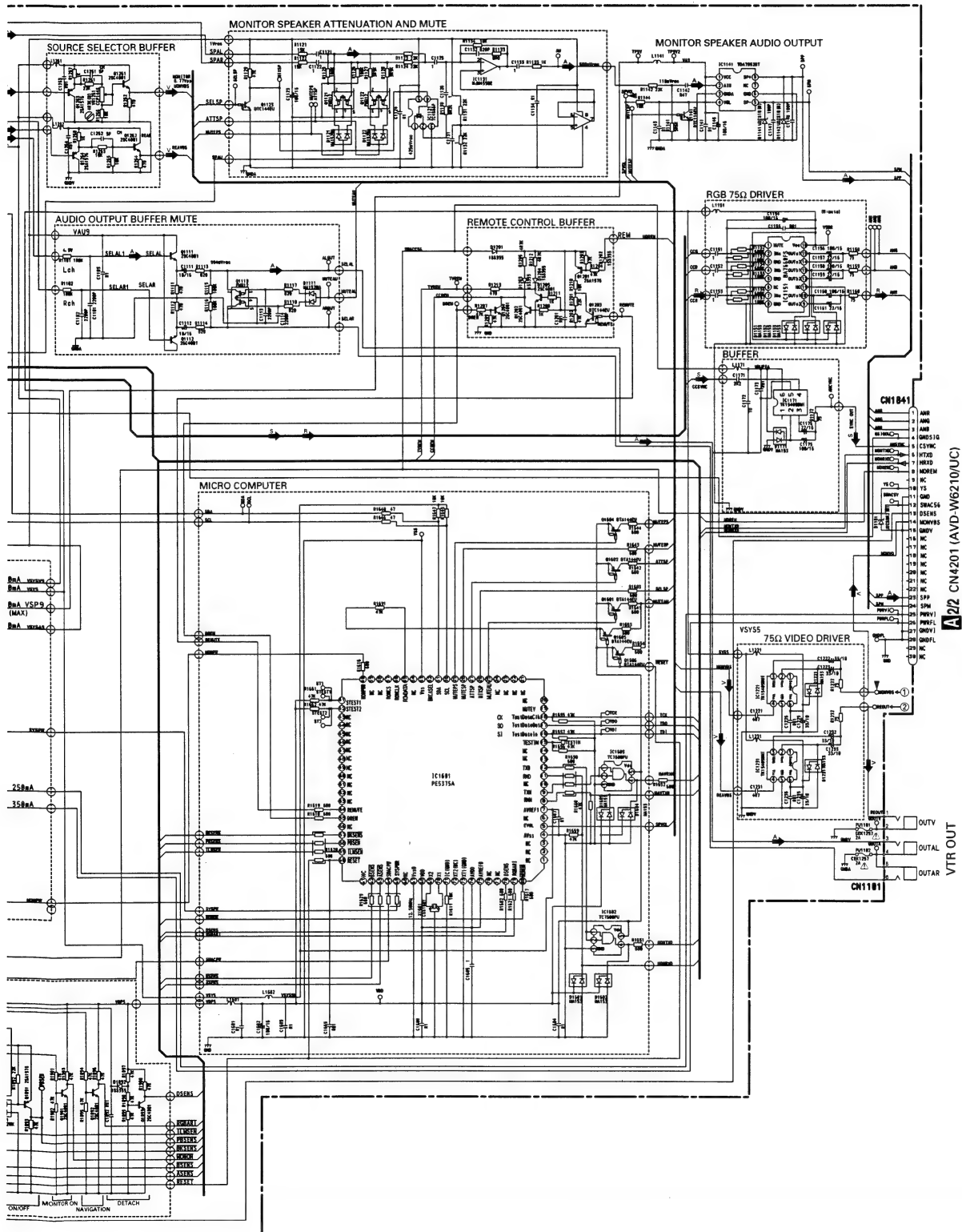


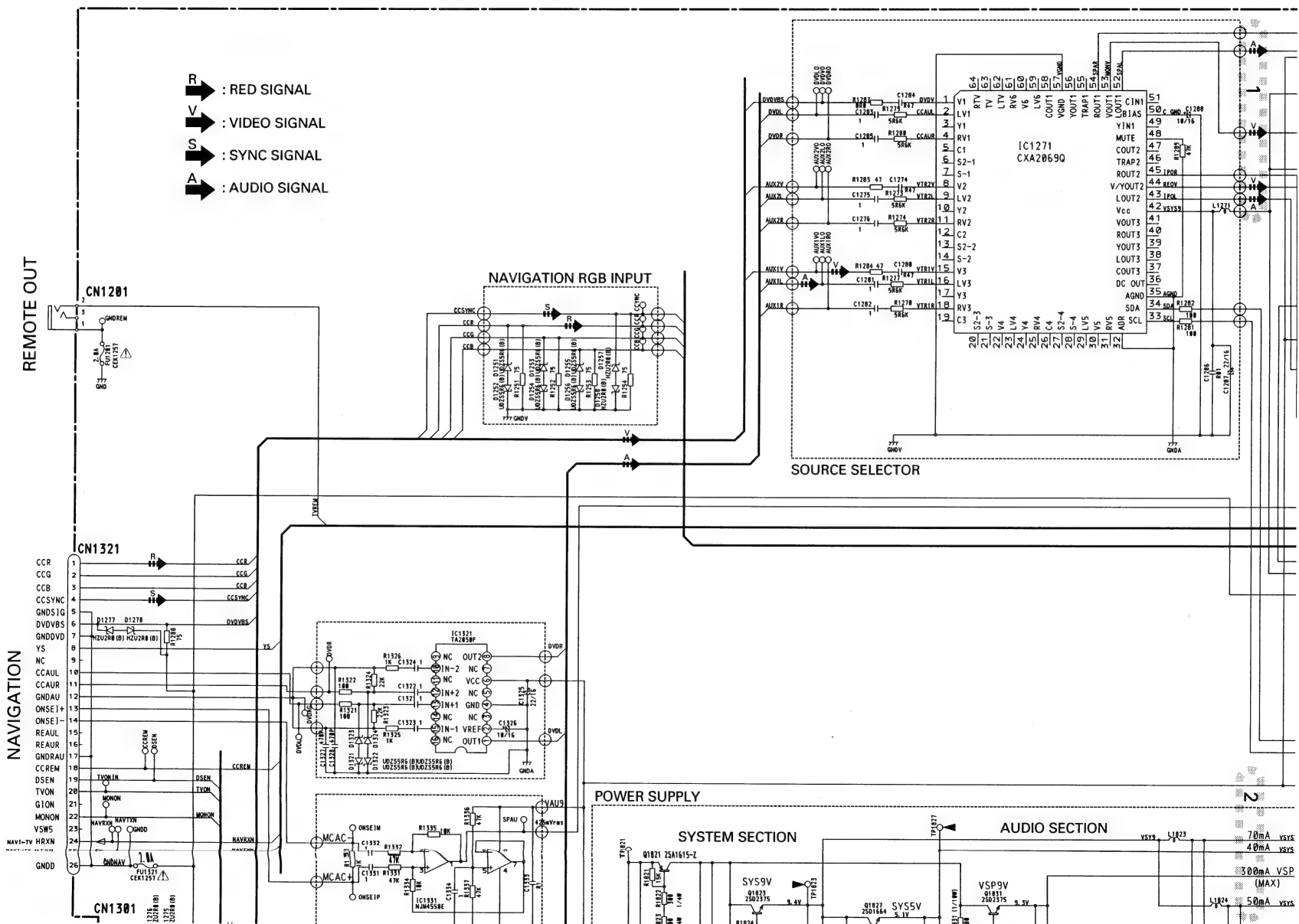
3.5 MOTHER UNIT(GUIDE PAGE)

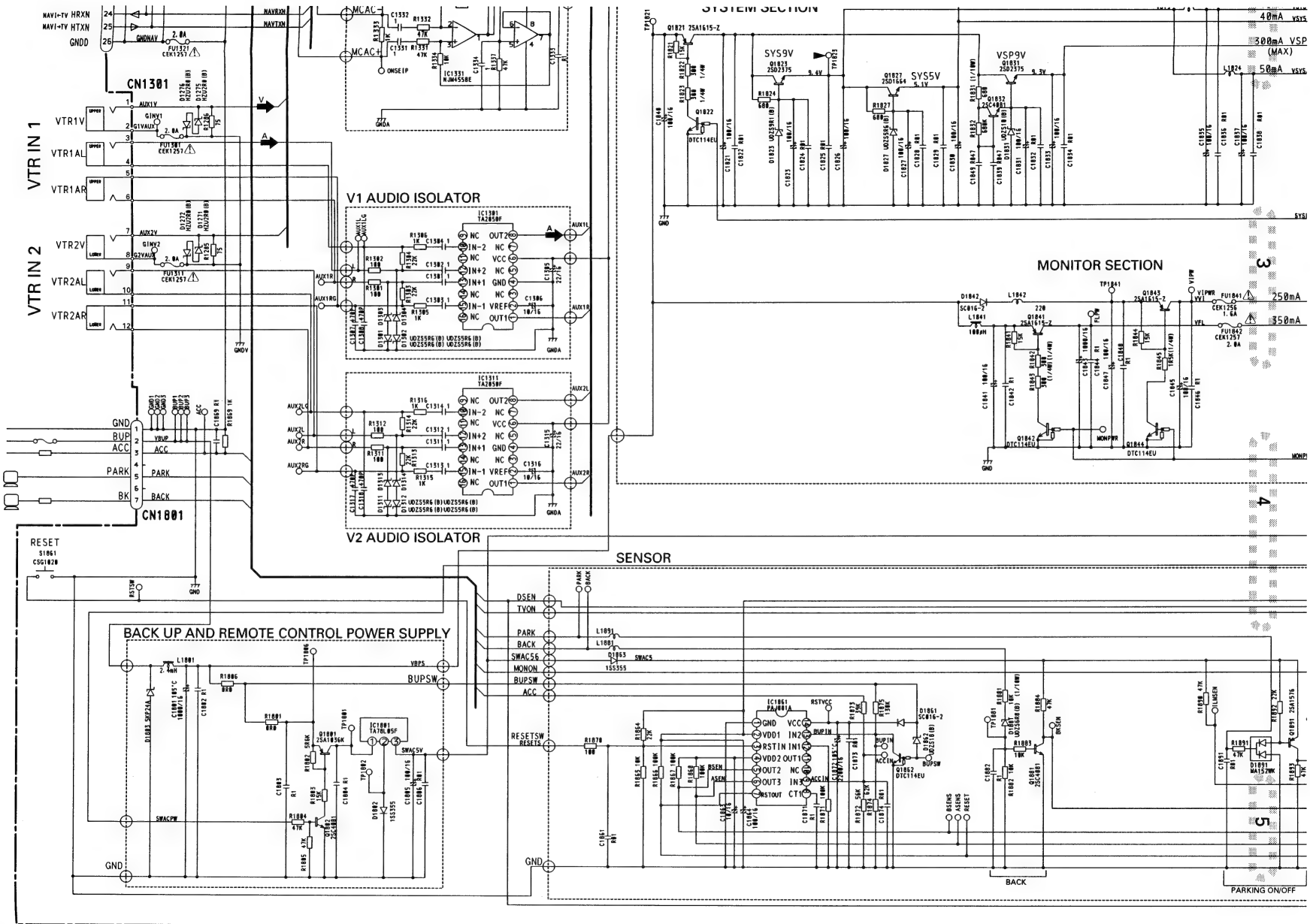
C-a



C

C-b**C** MOTHER UNIT





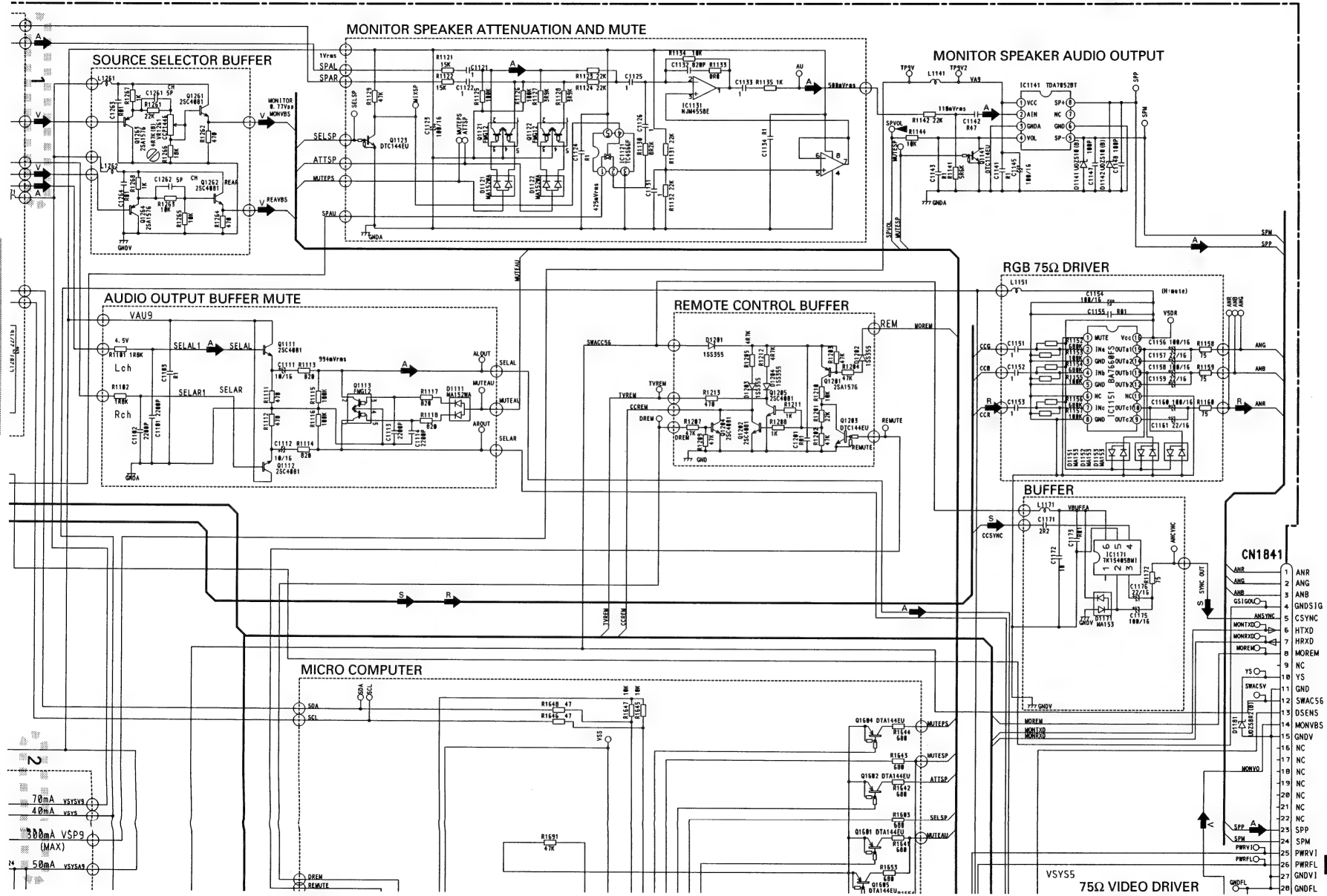
C-a C-b

C-b

AVD-W6210UC

C-a

37



A2/2 CN4201 (AVD-W6210/UC)
D CN2003, 2002 (AVD-W6210/EW)

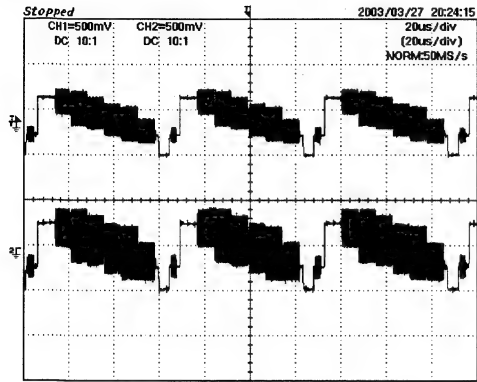
● Waveforms

Note : The encircled numbers denote measuring pointes in circuit diagram.

A

INPUT : Color bar signal

CH1 : ① MONVBS CH2 : ② REOUT



B

Filter= Smoothing : ON BW : FULL

Offset= CH1 : 0.000V CH2 : 0.000V CH3 : 0.000V CH4 : 0.0V

Record Length= Main : 10K Zoom : 10K

Trigger= Mode : AUTO Type : EDGE CH1 Delay : 0.0ms Hold Off : MINIMUM

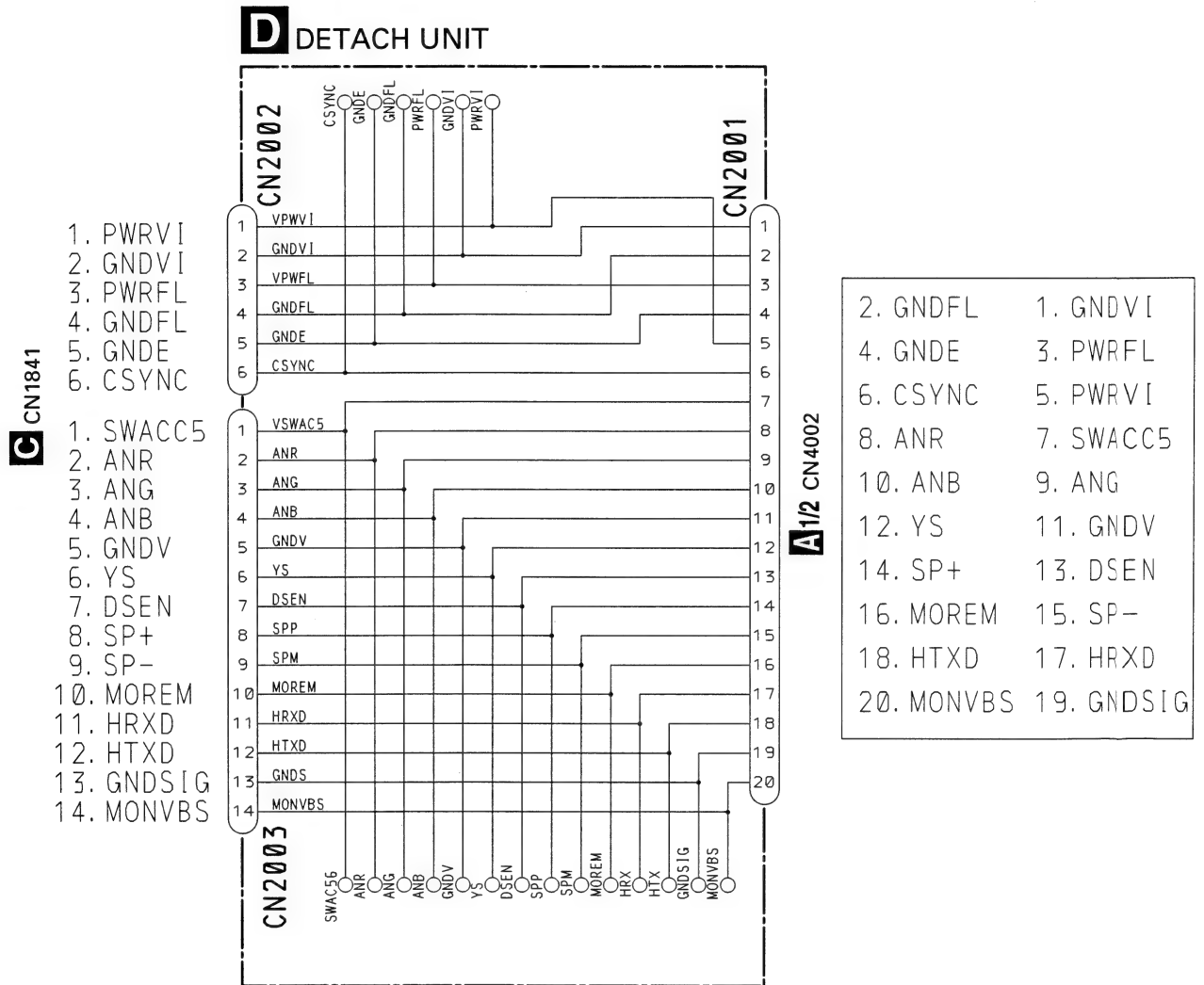
C

D

E

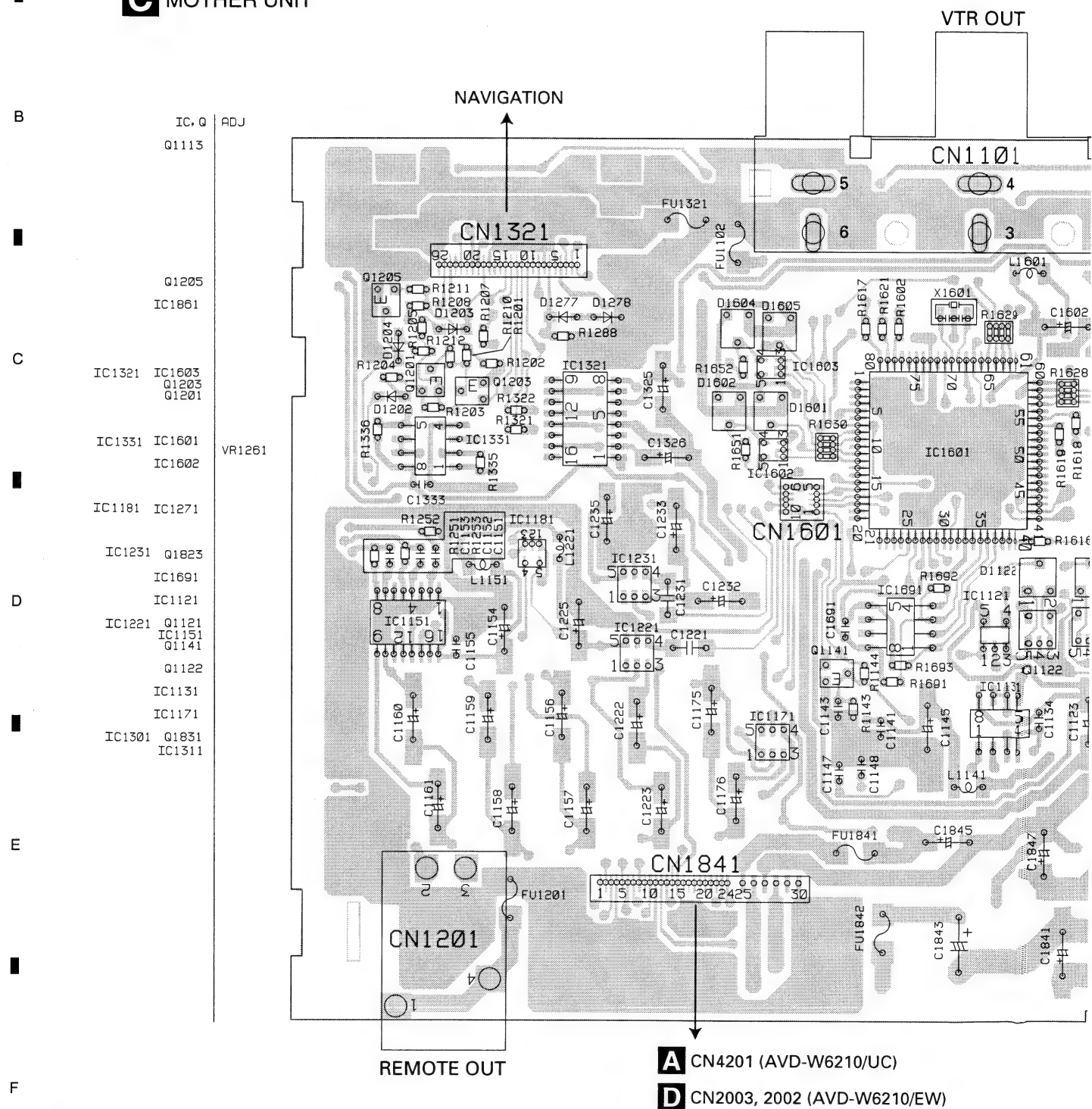
F

3.6 DETACH UNIT(AVD-W6210/EW)



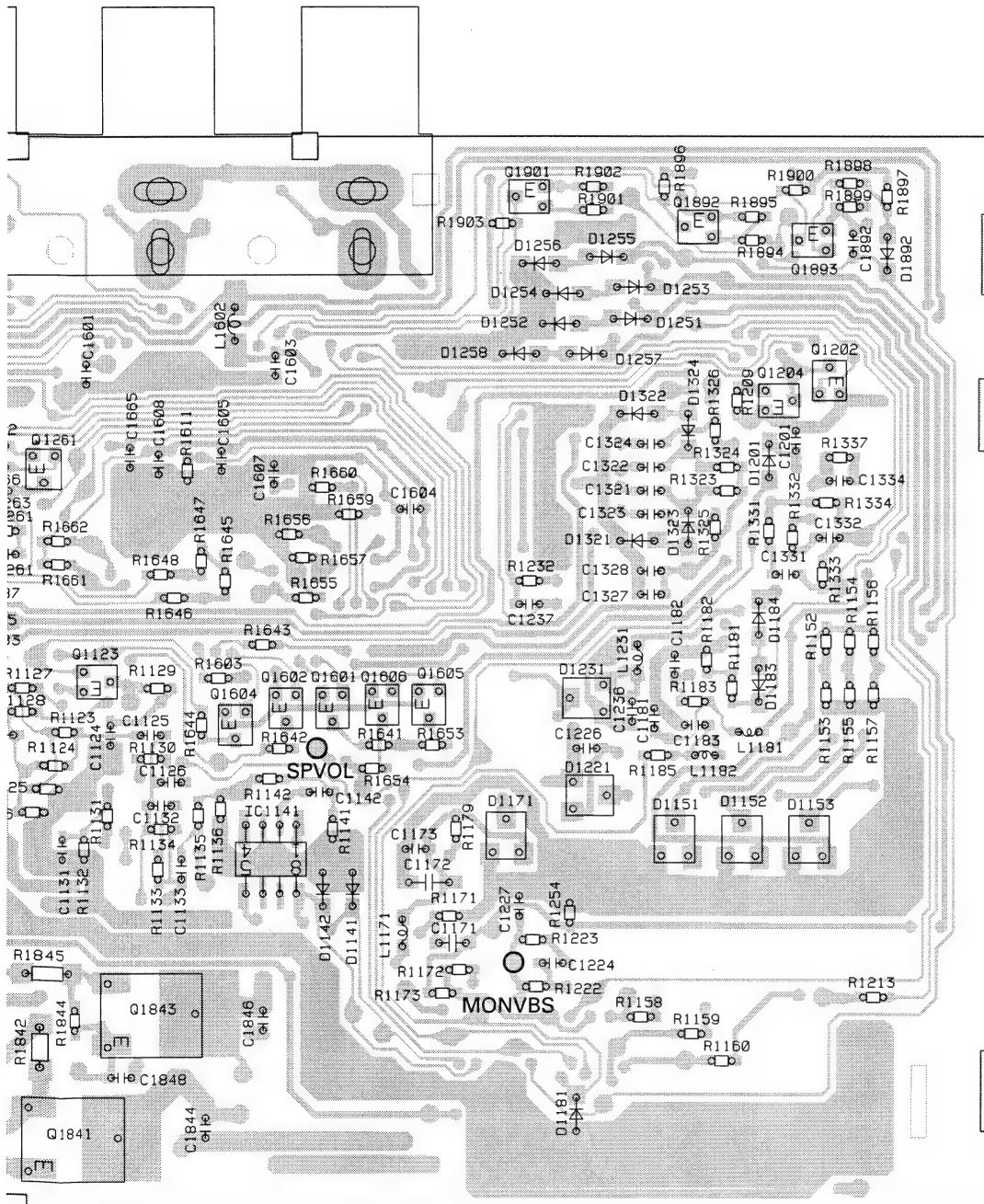
4.2 MOTHER UNIT

C MOTHER UNIT



F

SIDE B

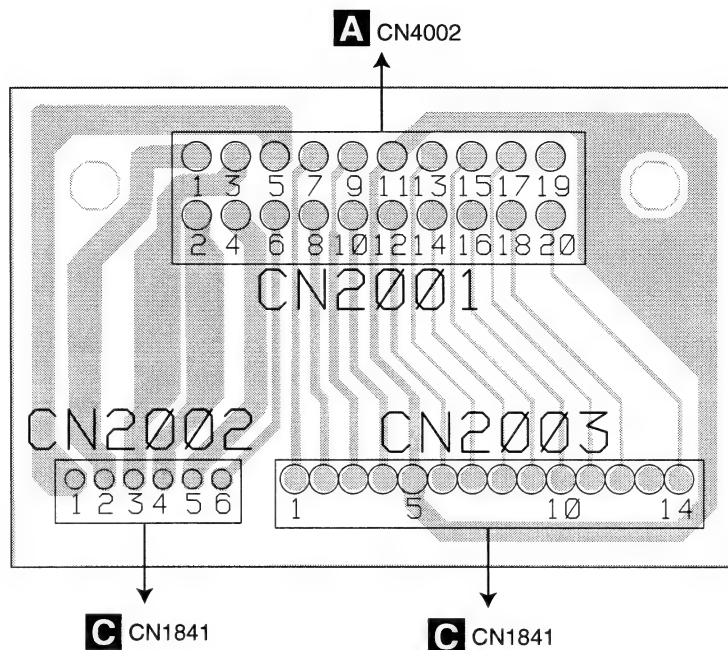


IC, 0
 Q1901
 Q1887 Q1881
 Q1112 Q1111
 Q1892
 Q1893
 Q1202
 Q1204
 Q1891
 Q1262
 Q1862 Q1261
 Q1821 Q1263
 Q1264
 Q1822
 Q1801 Q1802
 IC1801
 Q1123 Q1602
 Q1601 Q1606
 Q1604 Q1605
 Q1827
 IC1141
 Q1844
 Q1832
 Q1842 Q1843
 Q1841

4.4 DETACH UNIT(AVD-W6210/EW)

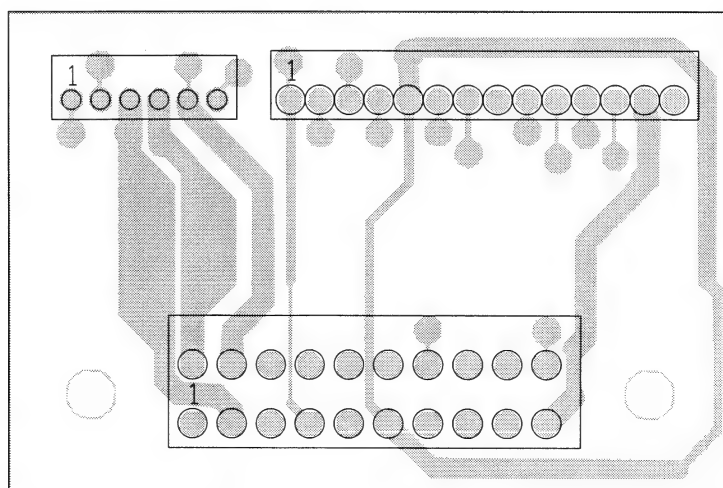
D DETACH UNIT

SIDE A



D DETACH UNIT

SIDE B



5. ELECTRICAL PARTS LIST

NOTES:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○○○○○J, RS1/○○○○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

	====Circuit Symbol and No.====Part Name		Part No.	====Circuit Symbol and No.====Part Name		Part No.
B	C Unit Number : CWM8853			Q 1862	Transistor	DTC114EU
	Unit Name : Mother Unit			Q 1881	Transistor	2SC4081
	MISCELLANEOUS			Q 1891	Transistor	2SA1576
				Q 1892	Transistor	2SC4081
				Q 1893	Transistor	2SC4081
C	IC 1121	IC	TC4S66F	Q 1901	Transistor	2SC4081
	IC 1131	IC	NJM4558E	D 1111	Diode	MA152WA
	IC 1141	IC	TDA7052BT	D 1121	Diode	MA152WA
	IC 1151	IC	BA7660FS	D 1122	Diode	MA152WA
	IC 1171	IC	TK15405BMI	D 1141	Diode	UDZS10(B)
	IC 1221	IC	TK15405BMI	D 1142	Diode	UDZS10(B)
	IC 1231	IC	TK15405BMI	D 1151	Diode	MA153
	IC 1271	IC	CXA2069Q	D 1152	Diode	MA153
	IC 1301	IC	TA2050F	D 1153	Diode	MA153
	IC 1311	IC	TA2050F	D 1171	Diode	MA153
D	IC 1321	IC	TA2050F	D 1181	Diode	UDZS8R2(B)
	IC 1331	IC	NJM4558E	D 1201	Diode	1SS355
	IC 1601	IC	PE5375A	D 1202	Diode	1SS355
	IC 1602	IC	TC7S08FU	D 1203	Diode	1SS355
	IC 1603	IC	TC7S08FU	D 1204	Diode	1SS355
	IC 1801	IC	TA78L05F	D 1221	Diode	MA153
	IC 1861	IC	PAJ001A	D 1231	Diode	MA153
	Q 1111	Transistor	2SC4081	D 1251	Diode	UDZS5R6(B)
	Q 1112	Transistor	2SC4081	D 1252	Diode	UDZS5R6(B)
	Q 1113	Transistor	FMG12	D 1253	Diode	UDZS5R6(B)
E	Q 1121	Transistor	FMG12	D 1254	Diode	UDZS5R6(B)
	Q 1122	Transistor	FMG12	D 1255	Diode	UDZS5R6(B)
	Q 1123	Transistor	DTC144EU	D 1256	Diode	UDZS5R6(B)
	Q 1141	Transistor	DTC114EU	D 1257	Diode	HZU2R0(B)
	Q 1201	Transistor	2SA1576	D 1258	Diode	HZU2R0(B)
	Q 1202	Transistor	2SC4081	D 1271	Diode	HZU2R0(B)
	Q 1203	Transistor	DTC144EU	D 1272	Diode	HZU2R0(B)
	Q 1204	Transistor	2SC4081	D 1275	Diode	HZU2R0(B)
	Q 1205	Transistor	2SC4081	D 1276	Diode	HZU2R0(B)
	Q 1261	Transistor	2SC4081	D 1277	Diode	HZU2R0(B)
F	Q 1262	Transistor	2SC4081	D 1278	Diode	HZU2R0(B)
	Q 1263	Transistor	2SA1576	D 1301	Diode	UDZS5R6(B)
	Q 1264	Transistor	2SA1576	D 1302	Diode	UDZS5R6(B)
	Q 1601	Transistor	DTA144EU	D 1303	Diode	UDZS5R6(B)
	Q 1602	Transistor	DTA144EU	D 1304	Diode	UDZS5R6(B)
	Q 1604	Transistor	DTA144EU	D 1311	Diode	UDZS5R6(B)
	Q 1605	Transistor	DTA144EU	D 1312	Diode	UDZS5R6(B)
	Q 1606	Transistor	DTA144EU	D 1313	Diode	UDZS5R6(B)
	Q 1801	Transistor	2SA1036K	D 1314	Diode	UDZS5R6(B)
	Q 1802	Transistor	2SC4081	D 1321	Diode	UDZS5R6(B)
G	Q 1821	Transistor	2SA1615-Z	D 1322	Diode	UDZS5R6(B)
	Q 1822	Transistor	DTC114EU	D 1323	Diode	UDZS5R6(B)
	Q 1823	Transistor	2SD2375	D 1324	Diode	UDZS5R6(B)
	Q 1827	Transistor	2SD1664	D 1601	Diode	MA153
	Q 1831	Transistor	2SD2375	D 1602	Diode	MA153
	Q 1832	Transistor	2SC4081	D 1604	Diode	MA153
	Q 1841	Transistor	2SA1615-Z	D 1605	Diode	MA153
	Q 1842	Transistor	DTC114EU	D 1802	Diode	1SS355
	Q 1843	Transistor	2SA1615-Z	D 1803	Diode	5KP24A
	Q 1844	Transistor	DTC114EU	D 1823	Diode	UDZS9R1(B)

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.	
D 1827 Diode	UDZS5R6(B)	R 1141	RS1/16S562J	A
D 1831 Diode	UDZS10(B)	R 1142	RS1/16S223J	
D 1842 Diode	SC016-2	R 1144	RS1/16S103J	
D 1861 Diode	SC016-2	R 1152	RS1/16S684J	
D 1862 Diode	UDZS18(B)	R 1153	RS1/16S104J	
D 1863 Diode	1SS355	R 1154	RS1/16S684J	
D 1881 Diode	UDZS6R8(B)	R 1155	RS1/16S104J	
D 1891 Diode	MA152WK	R 1156	RS1/16S684J	
D 1892 Diode	1SS355	R 1157	RS1/16S104J	
L 1141 Inductor	LCKB4R7M2520	R 1158	RS1/16S750J	
L 1151 Inductor	LCKA150J2520	R 1159	RS1/16S750J	
L 1171 Inductor	LCTC120K2125	R 1160	RS1/16S750J	
L 1221 Inductor	LCTC120K2125	R 1172	RS1/16S750J	B
L 1231 Inductor	LCTC120K2125	R 1201	RS1/16S223J	
L 1261 Inductor	LCTC4R7K1608	R 1202	RS1/16S473J	
L 1262 Inductor	LCTC4R7K1608	R 1203	RS1/16S473J	
L 1271 Inductor	LCKA100J2520	R 1204	RS1/16S473J	
L 1601 Inductor	LCKA150J2520	R 1205	RS1/16S472J	
L 1602 Inductor	LCKA150J2520	R 1207	RS1/16S473J	
L 1801 Choke Coil 2.4mH	CTH1101	R 1208	RS1/16S102J	
L 1823 Inductor	LCKB150K2520	R 1209	RS1/16S473J	
L 1824 Inductor	LCKB150K2520	R 1210	RS1/16S103J	
L 1841 Choke Coil 100μH	CTH1140	R 1211	RS1/16S102J	
L 1842 Inductor	CTH1256	R 1212	RS1/16S472J	
L 1881 Inductor	CTF1295	R 1213	RS1/16S471J	
L 1891 Inductor	CTF1295	R 1222	RS1/16S750J	C
X 1601 Radiator 12.58MHz	CSS1601	R 1232	RS1/16S750J	
S 1861 Switch(RESET)	CSG1020	R 1251	RS1/16S750J	
VR 1261 Semi-fixed 4.7kΩ(B)	CCP1446	R 1252	RS1/16S750J	
FU 1101 Fuse 2A	CEK1257	R 1253	RS1/16S750J	
FU 1102 Fuse 2A	CEK1257	R 1254	RS1/16S750J	
FU 1201 Fuse 2A	CEK1257	R 1261	RS1/16S223J	
FU 1301 Fuse 2A	CEK1257	R 1262	RS1/16S471J	
FU 1311 Fuse 2A	CEK1257	R 1263	RS1/16S103J	
FU 1321 Fuse 2A	CEK1257	R 1264	RS1/16S471J	
FU 1841 Fuse 1.6A	CEK1256	R 1265	RS1/16S103J	
FU 1842 Fuse 2A	CEK1257	R 1266	RS1/16S183J	
		R 1267	RS1/16S102J	
		R 1268	RS1/16S102J	
		R 1273	RS1/16S562J	D
RESISTORS				
R 1101	RS1/16S182J			
R 1102	RS1/16S182J	R 1274	RS1/16S562J	
R 1111	RS1/16S471J	R 1277	RS1/16S562J	
R 1112	RS1/16S471J	R 1278	RS1/16S562J	
R 1113	RS1/16S821J	R 1279	RS1/16S562J	
		R 1280	RS1/16S562J	
R 1114	RS1/16S821J			
R 1115	RS1/16S104J	R 1281	RS1/16S101J	
R 1116	RS1/16S104J	R 1282	RS1/16S101J	
R 1117	RS1/16S821J	R 1283	RS1/16S470J	
R 1118	RS1/16S821J	R 1284	RS1/16S470J	
		R 1285	RS1/16S750J	
R 1121	RS1/16S153J			
R 1122	RS1/16S153J	R 1286	RS1/16S750J	
R 1123	RS1/16S223J	R 1287	RS1/16S0R0J	
R 1124	RS1/16S223J	R 1288	RS1/16S750J	E
R 1125	RS1/16S104J	R 1289	RS1/16S473J	
		R 1301	RS1/16S101J	
R 1126	RS1/16S104J			
R 1127	RS1/16S392J	R 1302	RS1/16S101J	
R 1128	RS1/16S392J	R 1303	RS1/16S223J	
R 1129	RS1/16S473J	R 1304	RS1/16S223J	
R 1130	RS1/16S822J	R 1305	RS1/16S102J	
		R 1306	RS1/16S102J	
R 1131	RS1/16S223J			
R 1132	RS1/16S223J	R 1311	RS1/16S101J	
R 1133	RS1/16S0R0J	R 1312	RS1/16S101J	
R 1134	RS1/16S103J	R 1313	RS1/16S223J	
R 1135	RS1/16S102J	R 1314	RS1/16S223J	
		R 1315	RS1/16S102J	

	====Circuit Symbol and No.===Part Name		Part No.	====Circuit Symbol and No.===Part Name		Part No.
	---	-----		---	-----	
A	R	1316	RS1/16S102J	R	1866	RS1/16S104J
	R	1321	RS1/16S101J	R	1867	RS1/16S104J
	R	1322	RS1/16S101J	R	1868	RS1/16S104J
	R	1323	RS1/16S223J	R	1869	RN1/16SE1001D
	R	1324	RS1/16S223J	R	1870	RS1/16S101J
	R	1325	RS1/16S102J	R	1871	RS1/16S104J
	R	1326	RS1/16S102J	R	1872	RS1/16S563J
	R	1331	RS1/16S473J	R	1873	RS1/16S393J
	R	1332	RS1/16S473J	R	1874	RS1/16S623J
	R	1333	RS1/16S102J	R	1875	RS1/16S134J
B	R	1334	RS1/16S103J	R	1881	RS1/10S103J
	R	1335	RS1/16S103J	R	1882	RS1/16S103J
	R	1336	RS1/16S473J	R	1883	RS1/16S103J
	R	1337	RS1/16S473J	R	1884	RS1/16S473J
	R	1602	RS1/16S681J	R	1890	RS1/16S473J
	R	1603	RS1/16S681J	R	1891	RS1/16S473J
	R	1611	RS1/16S103J	R	1892	RS1/16S223J
	R	1616	RS1/16S681J	R	1893	RS1/16S473J
	R	1617	RS1/16S681J	R	1894	RS1/16S473J
	R	1618	RS1/16S681J	R	1895	RS1/16S473J
	R	1619	RS1/16S681J	R	1896	RS1/16S473J
	R	1621	RS1/16S681J	R	1897	RS1/16S473J
	R	1628	RAB4CQ681J	R	1898	RS1/16S473J
	R	1629	RAB4CQ681J	R	1899	RS1/16S473J
	R	1630	RAB4CQ681J	R	1900	RS1/16S473J
C	R	1641	RS1/16S681J	R	1901	RS1/16S473J
	R	1642	RS1/16S681J	R	1902	RS1/16S473J
	R	1643	RS1/16S681J	R	1903	RS1/16S473J
	R	1644	RS1/16S681J	CAPACITORS		
	R	1645	RS1/16S103J			
	R	1646	RS1/16S470J	C	1101	CKSRYB222K50
	R	1647	RS1/16S103J	C	1102	CKSRYB222K50
	R	1648	RS1/16S470J	C	1103	CKSRYB104K16
	R	1651	RS1/16S681J	C	1111	CEV100M16
	R	1652	RS1/16S681J	C	1112	CEV100M16
D	R	1653	RS1/16S681J	C	1113	CKSRYB222K50
	R	1654	RS1/16S681J	C	1114	CKSRYB222K50
	R	1655	RS1/16S473J	C	1121	CKSRYB105K10
	R	1656	RS1/16S473J	C	1122	CKSRYB105K10
	R	1657	RS1/16S473J	C	1123	CEV101M16
	R	1659	RS1/16S473J	C	1124	CKSRYB104K16
	R	1660	RS1/16S473J	C	1125	CKSRYB105K10
	R	1661	RS1/16S473J	C	1126	CKSRYB105K10
	R	1662	RS1/16S473J	C	1131	CKSRYB105K10
	R	1691	RS1/16S473J	C	1132	CCSRCH821J50
	R	1801	RS1/16S0R0J	C	1133	CKSRYB105K10
	R	1802	RS1/16S562J	C	1134	CKSRYB104K16
	R	1803	RS1/16S153J	C	1141	CKSRYB104K16
	R	1804	RS1/16S473J	C	1142	CKSRYB474K10
	R	1805	RS1/16S473J	C	1143	CKSRYB104K16
E	R	1806	RS1/10S0R0J	C	1145	CCH1228
	R	1821	RS1/16S153J	C	1147	CCSRCH101J50
	R	1822	RS1/4S301J	C	1148	CCSRCH101J50
	R	1823	RS1/4S301J	C	1151	CKSRYB105K10
	R	1824	RS1/16S681J	C	1152	CKSRYB105K10
	R	1827	RS1/16S681J	C	1153	CKSRYB105K10
	R	1831	RS1/10S681J	C	1154	CEV101M16
	R	1832	RS1/16S684J	C	1155	CKSRYB103K50
	R	1841	RS1/16S153J	C	1156	CEV101M16
	R	1842	RS1/4S301J	C	1157	CEV220M16
	R	1843	RS1/4S301J	C	1158	CEV101M16
	R	1844	RS1/16S153J	C	1159	CEV220M16
	R	1845	RS1/4S152J	C	1160	CEV101M16
	R	1864	RS1/16S223J	C	1161	CEV220M16
	R	1865	RS1/16S103J	C	1171	CKSQYB225K10

100μF/16V

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.	
C 1172	CKSYB106K6R3	C 1608	CKSRYB104K16	A
C 1173	CKSRYB103K50	C 1665	CKSRYB103K50	
C 1175	CEV101M16	C 1801	CEHAT102M16(P35)	
C 1176	CEV220M16	C 1802	CKSRYF104Z25	
C 1201	CKSRYB103K50	C 1803	CKSRYF104Z25	
C 1221	CKSYB475K16	C 1804	CKSRYF104Z25	
C 1222	CEV330M10	C 1805	CCH1228	B
C 1223	CEV330M10	C 1806	CKSRYB103K50	
C 1225	CEV330M10	C 1821	CCH1228	
C 1226	CKSRYB103K50	C 1822	CKSRYB103K50	
C 1231	CKSYB475K16	C 1823	CCH1228	
C 1232	CEV330M10	C 1824	CKSRYB103K50	
C 1233	CEV330M10	C 1825	CKSRYB103K50	
C 1235	CEV330M10	C 1826	CCH1228	
C 1236	CKSRYB103K50	C 1827	CCH1228	
C 1261	CCSRCH5R0D50	C 1828	CKSRYB103K50	
C 1262	CCSRCH5R0D50	C 1829	CKSRYB103K50	
C 1263	CKSRYB103K50	C 1830	CCH1228	
C 1264	CKSRYB103K50	C 1831	CEV101M16	
C 1274	CKSRYB474K10	C 1832	CKSRYB103K50	
C 1275	CKSRYB105K10	C 1833	CCH1228	
C 1276	CKSRYB105K10	C 1834	CKSRYB103K50	
C 1280	CKSRYB474K10	C 1835	CEV101M16	
C 1281	CKSRYB105K10	C 1836	CKSRYB103K50	
C 1282	CKSRYB105K10	C 1837	CEV101M16	
C 1283	CKSRYB105K10	C 1838	CKSRYB103K50	
C 1284	CKSRYB474K10	C 1839	CKSRYB473K50	C
C 1285	CKSRYB105K10	C 1840	CEV101M16	
C 1286	CKSRYB103K50	C 1841	CEV101M16	
C 1287	CEV220M16	C 1842	CKSRYF104Z25	
C 1288	CEV100M16	C 1843	CEHAT102M16(P35)	
C 1301	CKSRYB105K10	C 1844	CKSRYF104Z25	
C 1302	CKSRYB105K10	C 1845	CEV101M16	
C 1303	CKSRYB105K10	C 1846	CKSRYF104Z25	
C 1304	CKSRYB105K10	C 1847	CCH1228	
C 1305	CEV220M16	C 1848	CKSRYF104Z25	
C 1306	CEV100M16	C 1849	CKSRYB473K50	
C 1307	CCSRCH471J50	C 1861	CKSRYB103K50	
C 1308	CCSRCH471J50	C 1863	CEV100M16	D
C 1311	CKSRYB105K10	C 1864	CEV101M16	
C 1312	CKSRYB105K10	C 1869	CKSRYF104Z25	
C 1313	CKSRYB105K10	C 1871	CKSRYB104K16	
C 1314	CKSRYB105K10	C 1872	CEHAT222M16	
C 1315	CEV220M16	C 1873	CKSRYB103K50	
C 1316	CEV100M16	C 1874	CKSRYB103K50	
C 1317	CCSRCH471J50	C 1882	CKSRYF104Z25	
C 1318	CCSRCH471J50	C 1891	CKSRYF103Z50	
C 1321	CKSRYB105K10	C 1892	CKSRYF103Z50	
C 1322	CKSRYB105K10			
C 1323	CKSRYB105K10			
C 1324	CKSRYB105K10			
C 1325	CEV220M16			
C 1326	CEV100M16			
C 1327	CCSRCH471J50			
C 1328	CCSRCH471J50			
C 1331	CKSRYB105K10			
C 1332	CKSRYB105K10			
C 1333	CKSRYB104K16			
C 1334	CKSRYB105K10			
C 1601	CKSRYB104K16			
C 1602	CEV101M16			
C 1603	CKSRYB104K16			
C 1604	CKSRYB104K16			
C 1605	CKSRYB105K10			
C 1607	CKSRYB104K16			

Monitor Unit
Consists of
Monitor PCB
Keyboard PCB

A B Unit Number : CWM8887(AVD-W5210/UC)
CWM8852(AVD-W5210/EW)
Unit Name : Monitor Unit

MISCELLANEOUS

IC 4001	IC	TC90AS4AF-P
IC 4081	IC	PD57G3A
IC 4082	IC	TC7W134FU
IC 4092	IC	TC7S03FU
IC 4141	IC	TC7SH08FU
IC 4142	IC	TK1544MI
IC 4151	IC	NJM238V
IC 4181	IC	NJM022BV
IC 4212	IC	TC7SH08FU
IC 4401	IC	SBX360-01

A	====Circuit Symbol and No.===Part Name		Part No.	====Circuit Symbol and No.===Part Name		Part No.
	IC 4411	IC	NJM062V	D 4352	Diode (AVD-W6210/EW)	UDZS5R6(B)
	IC 4441	IC	OZ961IS	D 4353	Diode (AVD-W6210/EW)	UDZS5R6(B)
	IC 4442	IC	TA78L05F	D 4354	Diode (AVD-W6210/EW)	UDZS5R6(B)
	IC 4601	IC	PE5376A	D 4355	Diode (AVD-W6210/EW)	UDZS5R6(B)
	IC 4602	IC	S-80835CNNB-B8U	D 4356	Diode (AVD-W6210/EW)	UDZS5R6(B)
	IC 4651	IC	S-29131AFJ	D 4357	Diode (AVD-W6210/EW)	UDZS5R6(B)
	IC 4901	IC	NJM2903V	D 4358	Diode (AVD-W6210/EW)	UDZS5R6(B)
	IC 4951	IC	FA7700V	D 4359	Diode (AVD-W6210/EW)	UDZS5R6(B)
	IC 4981	IC	R1130H251B	D 4360	Diode (AVD-W6210/EW)	UDZS5R6(B)
	Q 4002	Transistor	2SC4617	D 4361	Diode (AVD-W6210/EW)	MA153
	Q 4101	Transistor	2SC4617	D 4362	Diode (AVD-W6210/EW)	MA153
	Q 4102	Transistor	2SA1774	D 4363	Diode (AVD-W6210/EW)	UDZS5R6(B)
	Q 4103	Transistor	2SC4617	D 4364	Diode (AVD-W6210/EW)	UDZS5R6(B)
	Q 4111	Transistor	2SC4617	D 4411	Photodiode	AM-30-21
	Q 4112	Transistor	2SA1774	D 4412	Diode	RB500V-40
	Q 4113	Transistor	2SC4617	D 4431	Diode	UDZS6R2(B)
	Q 4121	Transistor	2SC4617	D 4440	Diode	HZU6R2(B3)
	Q 4122	Transistor	2SA1774	D 4441	Diode	HZU6R2(B3)
	Q 4123	Transistor	2SC4617	D 4442	Diode	HZU6R2(B3)
	Q 4131	Transistor	2SC4617	D 4443	Diode	MA143
	Q 4132	Transistor	2SA1774	D 4444	Diode	MA143
	Q 4133	Transistor	2SC4617	D 4473	LED	CL-195PG-CD
	Q 4151	Transistor	UMZ1N	D 4474	LED	CL-195PG-CD
	Q 4152	Transistor	UMZ1N	D 4475	LED	CL-195PG-CD
	Q 4153	Transistor	UMZ1N	D 4476	LED	CL-195PG-CD
	Q 4154	Transistor	UMZ1N	D 4477	LED	CL-195PG-CD
	Q 4155	Transistor	UMZ1N	D 4481	Diode	UDZS5R6(B)
	Q 4156	Transistor	UMZ1N	D 4482	Diode	UDZS5R6(B)
	Q 4182	Transistor	UMX2N	D 4483	Diode	UDZS5R6(B)
	Q 4183	Transistor	UMT2N	D 4484	Diode	UDZS5R6(B)
	Q 4201	Transistor	DTC144EU	D 4485	Diode	UDZS5R6(B)
	Q 4202	Transistor	2SA1615-Z	D 4486	Diode	UDZS5R6(B)
	Q 4401	Transistor	DTC144TE	D 4487	Diode	UDZS5R6(B)
	Q 4431	Transistor	2SC4617	D 4488	Diode	UDZS5R6(B)
	Q 4432	Transistor	2SC4617	D 4601	Diode	RB500V-40
	Q 4433	Transistor	DTA144EU	D 4602	Diode	HZU3R9(B2)
	Q 4434	Transistor	2SC4081	D 4681	Diode	MA111
	Q 4443	FET	SI6544DQ	D 4682	Diode	MA111
	Q 4444	FET	SI6544DQ	D 4683	Diode	UDZS5R6(B)
	Q 4445	FET	2SK1062	D 4684	Diode	UDZS5R6(B)
	Q 4603	Transistor	2SC4617	D 4952	Diode	1SS250
	Q 4681	Transistor	IMD2A	D 4953	Diode	SFPB-54V
	Q 4682	Transistor	IMD2A	D 4954	Diode	SFPB-54V
	Q 4683	Transistor	FMG12	D 4955	Diode	1SS250
	Q 4951	Transistor	2SA1797	D 4956	Diode	UDZS18(B)
	Q 4952	Transistor	DTC144EE	D 4957	Diode	UDZS12(B)
	Q 4953	Transistor	2SK2018-01S	D 4991	Diode	HZU5R6(B2)
	Q 4991	Transistor	2SD1664	L 4001	Inductor	CTF1306
	D 4081	Diode	1SS355	L 4002	Inductor	CTF1306
	D 4201	Diode (AVD-W6210/UC)	MA153	L 4003	Inductor	CTF1306
	D 4202	Diode (AVD-W6210/UC)	MA153	L 4004	Inductor	CTF1306
	D 4203	Diode (AVD-W6210/UC)	MA153	L 4005	Inductor-Array	CTF1421
	D 4204	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4006	Inductor-Array	CTF1421
	D 4205	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4008	Inductor	CTF1306
	D 4206	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4009	Ferrite Beed	CTF1528
	D 4207	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4011	Inductor	CTF1306
	D 4208	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4012	Ferrite Beed	CTF1528
	D 4209	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4013	Ferrite Beed	CTF1528
	D 4210	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4014	Ferrite Beed	CTF1528
	D 4211	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4015	Inductor	CTF1306
	D 4212	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4016	Ferrite Beed	CTF1528
	D 4213	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4017	Inductor	CTF1306
	D 4214	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4071	Inductor	LCTA100J2520
	D 4215	Diode (AVD-W6210/UC)	UDZS5R6(B)	L 4074	Inductor	LCTA100J2520
	D 4351	Diode (AVD-W6210/EW)	UDZS5R6(B)	L 4075	Inductor	LCTA100J2520

F

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.	
L 4078 Inductor	LCTA100J2520	R 4031	RS1/16S101J			A
L 4079 Inductor	CTF1306	R 4065	RS1/16S0R0J			
L 4081 Inductor	LCTA101J2520	R 4081	RS1/16S102J			
L 4091 Inductor	CTF1306	R 4083	RS1/16S684J			
L 4101 Inductor	LCTA100J2520	R 4093	RS1/16S0R0J			
L 4141 Inductor	LCTA100J2520	R 4101	RS1/16S1502F			
L 4151 Inductor	LCTA100J2520	R 4102	RS1/16S1003F			
L 4152 Inductor	LCTA100J2520	R 4103	RS1/16S681J			
L 4181 Inductor	LCTA101J2520	R 4104	RS1/16S331J			
L 4182 Inductor	LCTA101J2520	R 4107	RS1/16S0R0J			
L 4201 Inductor	CTH1256	R 4108	RS1/16S331J			
L 4212 Inductor	CTF1388	R 4109	RS1/16S391J			
L 4411 Inductor	LCTA150J2520	R 4110	RS1/16S391J			B
L 4441 Inductor	CTH1262	R 4111	RS1/16S153J			
L 4601 Inductor	LCTA100J2520	R 4112	RS1/16S104J			
L 4801 Inductor	LCTA100J2520	R 4113	RS1/16S681J			
L 4802 Inductor	LCTA100J2520	R 4114	RS1/16S331J			
L 4803 Inductor	LCTA100J2520	R 4118	RS1/16S331J			
L 4804 Inductor	LCTA100J2520	R 4119	RS1/16S391J			
L 4901 Inductor	LCTA2R2J2520	R 4120	RS1/16S391J			
L 4951 Inductor	LCTA100J2520	R 4121	RS1/16S153J			
L 4952 Coil	CTH1195	R 4122	RS1/16S104J			
L 4953 Inductor	LCTA100J2520	R 4123	RS1/16S681J			
L 4954 Choke Coil 100μH	CTH1302	R 4124	RS1/16S331J			
L 4955 Choke Coil 100μH	CTH1302	R 4128	RS1/16S331J			
L 4956 Inductor	LCTA100J2520	R 4129	RS1/16S391J			C
L 4981 Choke Coil 10μH	CTH1249	R 4130	RS1/16S391J			
T 4441 Transformer	CTT1103	R 4131	RS1/16S153J			
T 4951 Transformer	CTT1110	R 4132	RS1/16S104J			
X 4001 Crystal Resonator 42.000MHz	CSS1604	R 4133	RS1/16S681J			
X 4601 Radiator 12.58MHz	CSS1601	R 4134	RS1/16S331J			
S 4471 Push Switch	CSG1112	R 4138	RS1/16S331J			
S 4472 Push Switch	CSG1112	R 4139	RS1/16S391J			
S 4473 Push Switch	CSG1111	R 4140	RS1/16S391J			
S 4474 Push Switch	CSG1111	R 4141	RS1/16S105J			
S 4475 Push Switch	CSG1111	R 4142	RS1/16S224J			
S 4476 Push Switch	CSG1112	R 4145	RS1/16S2701F			
S 4477 Push Switch	CSG1112	R 4146	RS1/16S4702F			
S 4478 Switch	CSX1047	R 4147	RS1/16S3302F			
VR 4951 Semi-fixed 2.2Ω(B)	CCP1444	R 4148	RS1/16S1002F			D
FU 4441 Fuse 1.25A	CEK1255	R 4150	RS1/16S183J			
FU 4951 Fuse 1.25A	CEK1255	R 4152	RS1/16S3901F			
BZ 4601 Buzzer	CPV1062	R 4153	RS1/16S1501F			
		R 4154	RS1/16S102J			
		R 4155	RS1/16S102J			
RESISTORS						
R 4001	RS1/16S101J	R 4156	RS1/16S1501F			
R 4002	RS1/16S470J	R 4157	RS1/16S3901F			
R 4003	RS1/16S101J	R 4160	RS1/16S1002F			
R 4004	RS1/16S101J	R 4161	RS1/16S1802F			
R 4005	RS1/16S473J	R 4162	RS1/16S102J			
R 4006	RS1/16S392J	R 4163	RS1/16S3901F			
R 4009	RS1/16S152J	R 4164	RS1/16S1501F			
R 4010	RS1/16S331J	R 4165	RS1/16S102J			
R 4012	RS1/16S105J	R 4166	RS1/16S272J			E
R 4013	RS1/16S391J	R 4167	RS1/16S102J			
R 4014	RAB4C101J	R 4168	RS1/16S272J			
R 4015	RS1/16S473J	R 4169	RS1/16S102J			
R 4018	RS1/16S101J	R 4170	RS1/16S272J			
R 4022	RS1/16S101J	R 4171	RS1/16S331J			
R 4023	RS1/16S0R0J	R 4172	RS1/16S103J			
R 4024	RS1/16S333J	R 4174	RS1/16S331J			
R 4025	RS1/16S101J	R 4175	RS1/16S103J			
R 4026	RS1/16S101J	R 4177	RS1/16S331J			
R 4027	RS1/16S101J	R 4178	RS1/16S103J			
R 4030	RS1/16S101J	R 4180	RS1/16S243J			

A	====Circuit Symbol and No.====Part Name		Part No.	====Circuit Symbol and No.====Part Name		Part No.
	R	4181	RS1/16S3002F	R	4472	RS1/16S333J
	R	4182	RS1/16S223J	R	4473	RS1/16S104J
	R	4183	RS1/16S1203F	R	4475	RS1/16S153J
	R	4184	RS1/16S1602F	R	4476	RS1/16S333J
	R	4185	RS1/16S1502F	R	4477	RS1/16S104J
	R	4186	RS1/16S1002F	R	4478	RS1/16S153J
	R	4187	RS1/16S1002F	R	4479	RS1/16S333J
	R	4188	RS1/16S101J	R	4480	RS1/16S104J
	R	4189	RS1/16S153J	R	4481	RS1/16S153J
	R	4190	RS1/16S100J	R	4482	RS1/16S333J
	R	4191	RS1/16S153J	R	4483	RS1/16S104J
	R	4192	RS1/16S100J	R	4484	RS1/4S821J
	R	4193	RS1/16S0R0J	R	4485	RS1/4S821J
	R	4194	RS1/16S0R0J	R	4486	RS1/4S102J
	R	4201 (AVD-W6210/UC)	RS1/16S750J	R	4487	RS1/4S102J
	R	4202 (AVD-W6210/UC)	RS1/16S750J	R	4489	RS1/4S122J
	R	4203 (AVD-W6210/UC)	RS1/16S75R0D	R	4490	RS1/4S122J
	R	4204 (AVD-W6210/UC)	RS1/16S75R0D	R	4603	RS1/16S473J
	R	4205 (AVD-W6210/UC)	RS1/16S75R0D	R	4604	RS1/16S471J
	R	4211	RS1/16S102J	R	4605	RS1/16S473J
	R	4212	RS1/16S0R0J	R	4606	RAB4C471J
	R	4213	RS1/16S0R0J	R	4607	RAB4C471J
	R	4214	RS1/16S0R0J	R	4609	RS1/16S471J
	R	4215	RS1/16S102J	R	4610	RS1/16S471J
	R	4216	RS1/16S0R0J	R	4611	RS1/16S470J
	R	4217	RS1/16S0R0J	R	4612	RS1/16S470J
	R	4218	RS1/16S0R0J	R	4613	RS1/16S272J
	R	4231	RS1/4S331J	R	4614	RS1/16S272J
	R	4232	RS1/4S331J	R	4619	RS1/16S473J
	R	4233	RS1/16S153J	R	4620	RS1/16S102J
	R	4317	RS1/16S0R0J	R	4621	RS1/16S223J
	R	4351 (AVD-W6210/EW)	RS1/8S0R0J	R	4622	RS1/16S473J
	R	4352 (AVD-W6210/EW)	RS1/8S0R0J	R	4623	RS1/16S102J
	R	4353 (AVD-W6210/EW)	RS1/8S0R0J	R	4624	RAB4C473J
	R	4354 (AVD-W6210/EW)	RS1/8S0R0J	R	4625	RS1/16S103J
	R	4355 (AVD-W6210/EW)	RS1/16S750J	R	4626	RS1/16S473J
	R	4356 (AVD-W6210/EW)	RS1/16S75R0D	R	4627	RAB4C473J
	R	4357 (AVD-W6210/EW)	RS1/16S75R0D	R	4628	RS1/16S0R0J
	R	4358 (AVD-W6210/EW)	RS1/16S75R0D	R	4629	RS1/16S473J
	R	4359 (AVD-W6210/EW)	RS1/16S750J	R	4630	RS1/16S0R0J
	R	4360 (AVD-W6210/EW)	RS1/16S102J	R	4637	RS1/16S101J
	R	4361 (AVD-W6210/EW)	RS1/8S0R0J	R	4641	RS1/16S473J
	R	4362 (AVD-W6210/EW)	RS1/8S0R0J	R	4643	RS1/16S473J
	R	4401	RS1/16S470J	R	4645	RS1/16S473J
	R	4402	RS1/16S470J	R	4651	RAB4C102J
	R	4403	RS1/16S472J	R	4652	RS1/16S102J
	R	4411	RS1/16S685J	R	4655	RS1/16S102J
	R	4412	RS1/16S105J	R	4681	RS1/16S104J
	R	4413	RS1/16S393J	R	4682	RS1/16S104J
	R	4414	RS1/16S103J	R	4683	RS1/16S102J
	R	4431	RS1/16S473J	R	4684	RS1/16S102J
	R	4432	RS1/16S104J	R	4802	RS1/16S0R0J
	R	4433	RS1/16S473J	R	4803	RS1/16S333J
	R	4434	RS1/16S105J	R	4804	RS1/16S0R0J
	R	4435	RS1/16S363J	R	4805	RS1/16S0R0J
	R	4436	RS1/16S102J	R	4806	RS1/16S0R0J
	R	4437	RS1/16S473J	R	4901	RS1/16S103J
	R	4446	RS1/16S513J	R	4902	RS1/16S103J
	R	4447	RS1/16S105J	R	4903	RS1/16S392J
	R	4448	RS1/16S6202D	R	4904	RS1/16S912J
	R	4449	RS1/16S103J	R	4905	RS1/16S2003F
	R	4451	RS1/16S103J	R	4906	RS1/16S153J
	R	4453	RS1/16S471J	R	4907	RS1/16S153J
	R	4455	RS1/16S3303D	R	4951	RS1/16S223J
	R	4471	RS1/16S153J	R	4952	RS1/16S103J

F

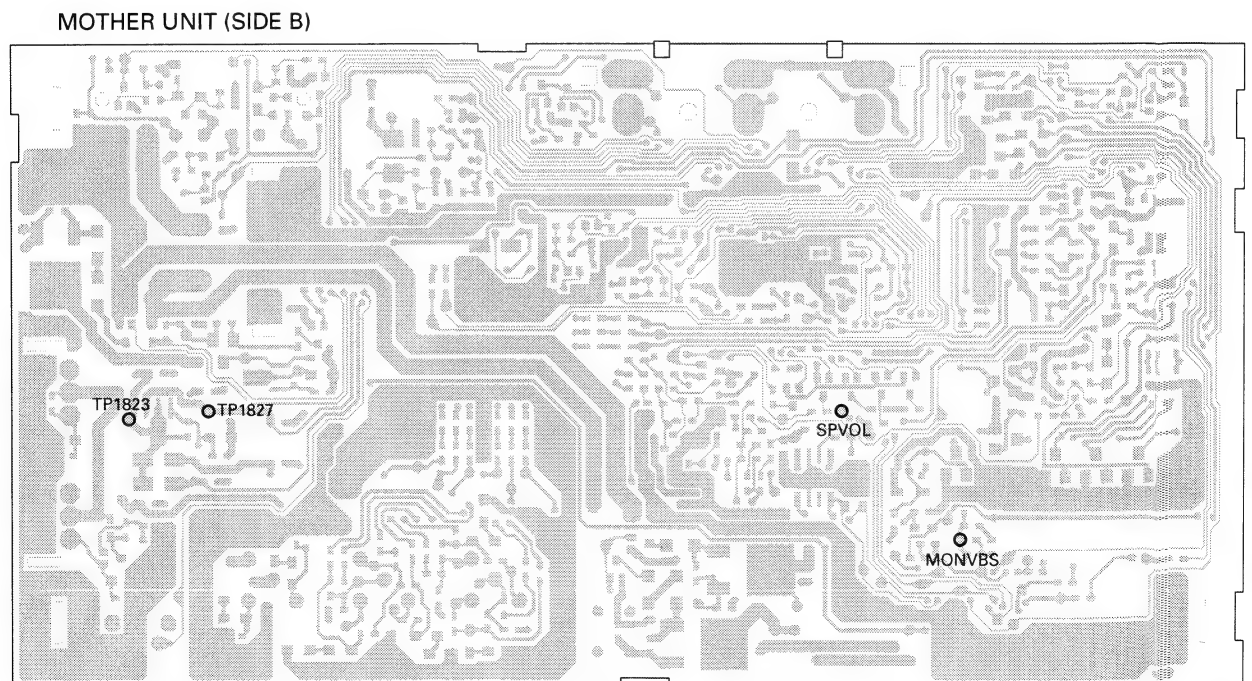
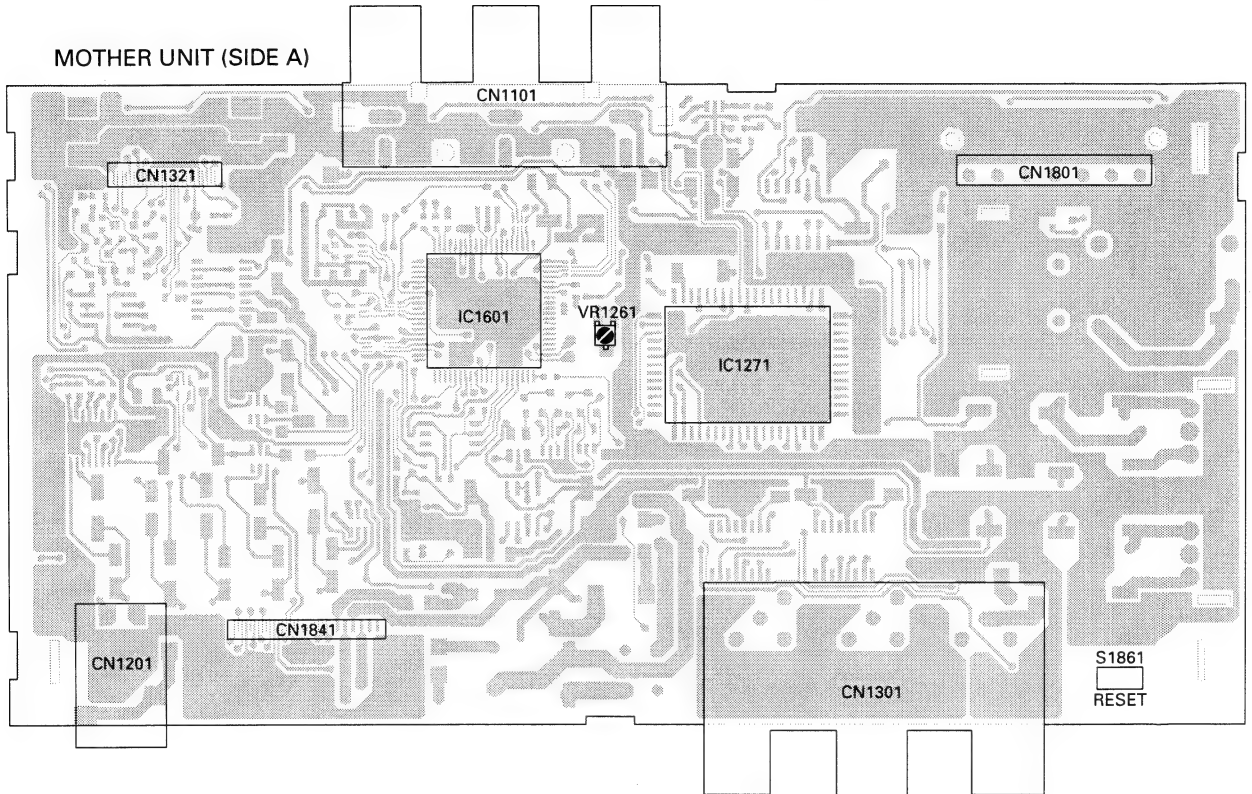
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R 4953	RS1/16S105J	C 4075	CKSRYP105K10	A
R 4954	RS1/16S912J	C 4076	CCH1440	
R 4955	RS1/16S243J	C 4081	CSZS100M10	
R 4956	RS1/16S124J	C 4082	CKSRYP104K25	
R 4957	RS1/16S183J	C 4083	CKSRYP474K10	
R 4959	RS1/16S682J	C 4085	CKSRYP104K25	B
R 4960	RS1/16S223J	C 4094	CKSRYP104K25	
R 4962	RS1/16S0R0J	C 4101	CKSYF106Z10	
R 4963	RS1/10S751J	C 4102	CCSRCH470J50	
R 4964	RS1/10S331J	C 4103	CCSRCH470J50	
R 4965	RS1/16S123J	C 4104	CKSRYP104Z25	C
R 4966	RS1/16S123J	C 4105	CSZS100M10	
R 4991	RS1/16S121J	C 4111	CKSYF106Z10	
CAPACITORS		C 4112	CCSRCH470J50	
		C 4113	CCSRCH470J50	
C 4001	CKSRYP105K10	C 4114	CKSRYP104Z25	D
C 4002	CKSSYP104Z16	C 4121	CKSYF106Z10	
C 4003	CKSSYP104Z16	C 4122	CCSRCH470J50	
C 4004	CKSSYP104Z16	C 4123	CCSRCH470J50	
C 4005	CKSSYP104Z16	C 4124	CKSRYP104Z25	
C 4006	CKSSYP104Z16	C 4131	CKSYF106Z10	E
C 4007	CKSSYP104Z16	C 4132	CCSRCH470J50	
C 4008	CKSSYP104Z16	C 4133	CCSRCH470J50	
C 4009	CKSSYP104Z16	C 4134	CKSRYP104Z25	
C 4010	CKSSYP104Z16	C 4140	CKSQYB225K10	
C 4011	CKSSYP104Z16	C 4141	CKSRYP105K10	F
C 4012	CKSSYP104Z16	C 4142	CKSRYP104Z25	
C 4013	CKSRYP392K50	C 4143	CSZS100M10	
C 4015	CKSRYP105K10	C 4144	CKSRYP104Z25	
C 4016	CKSSYP104Z16	C 4145	CKSRYP104Z25	
C 4017	CKSSYP104Z16	C 4151	CSZSR220M16	G
C 4018	CKSRYP104K25	C 4152	CKSRYP103K50	
C 4019	CKSRYP104K25	C 4153	CCSRCH4R0C50	
C 4020	CKSRYP104K25	C 4154	CCSRCH4R0C50	
C 4021	CKSSYP104Z16	C 4155	CCSRCH4R0C50	
C 4022	CKSSYP104Z16	C 4156	CKSRYP104Z25	H
C 4023	CKSSYP104Z16	C 4160	CKSRYP104Z25	
C 4024	CKSSYP104Z16	C 4161	CKSRYP104Z25	
C 4025	CKSSYP104Z16	C 4162	CKSRYP104Z25	
C 4026	CKSSYP104Z16	C 4163	CKSRYP105K10	
C 4027	CKSSYP104Z16	C 4164	CKSRYP105K10	I
C 4028	CKSSYP104Z16	C 4165	CKSRYP105K10	
C 4029	CKSSYP104Z16	C 4166	CKSRYP104Z25	
C 4030	CKSRYP104K25	C 4167	CKSRYP104Z25	
C 4031	CKSSYP104Z16	C 4168	CKSRYP104Z25	
C 4032	CKSSYP104Z16	C 4169	CKSRYP103K50	J
C 4033	CKSSYP104Z16	C 4170	CSZSR220M16	
C 4034	CKSSYP104Z16	C 4171	CSZSR220M16	
C 4035	CKSRYP103K50	C 4181	CSZSR220M16	
C 4036	CCSRCH4R0C50	C 4182	CKSRYP104Z25	
C 4037	CKSSYP104Z16	C 4183	CSZSR4R7M16	K
C 4040	CKSSYP104Z16	C 4184	CKSRYP104Z25	
C 4042	CCSRCH181J50	C 4186	CKSRYP104Z25	
C 4045	CCSRCH9R0D50	C 4188	CKSRYP104Z25	
C 4046	CCSRCH9R0D50	C 4201	CCG1138	
C 4047	CKSSYP104Z16	C 4202	CCG1138	L
C 4048	CKSSYP104Z16	C 4203	CCH1348	
C 4049	CKSSYP104Z16	C 4204	CCH1228	
C 4050	CKSRYP105K10	C 4205	CCG1170	
C 4051	CKSSYP104Z16	C 4206	CCG1170	
C 4052	CKSSYP104Z16	C 4223	CCG1138	M
C 4054	CCSRCH101J50	C 4224	CKSRYP104Z25	
C 4055	CKSRYP104Z25	C 4225	CKSRYP104Z25	
C 4071	CSZS100M10	C 4401	CKSRYP103K50	
C 4074	CKSRYP105K10	C 4402	CKSQYF105Z16	

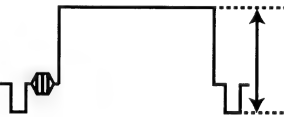
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	C	4411	CKSRYB473K50	C	4956		CKSRYB392K25
	C	4412	CKSRYF104Z25	C	4959	10μF	CCG1138
	C	4413	CKSRYF104Z25	C	4960	10μF	CCG1138
	C	4414	CKSRYF104Z25	C	4962		CKSRYB104K25
	C	4415	CKSRYF104Z25	C	4963		CKSRYB104K25
	C	4441	CKSRYB104K25	C	4964		CKSRYB104K25
	C	4442	CKSQYB105K16	C	4965		CKSRYB104K25
	C	4443	CKSQYB105K16	C	4966		CEHV220M35
	C	4444	CKSQYB105K16	C	4967	22μF/12V	CCH1359
B	C	4445	CKSQYB225K10	C	4968	68μF/6.3V	CCH1440
	C	4446	CKSQYB105K16	C	4969		CEHV220M35
	C	4447	CKSRYB104K25	C	4970		CKSRYB104K25
	C	4448	CKSRYB332K50	C	4971		CKSRYB104K25
	C	4449	CKSRYB152K50	C	4972		CKSRYB104K25
	C	4452	CKSRYB103K50	C	4973	100μF/16V	CCH1228
	C	4453	CKSRYB473K50	C	4974	100μF/16V	CCH1228
	C	4454	CCSRCH221J50	C	4975		CKSRYB104K25
	C	4455	CKSRYB473K50	C	4976		CEHV100M25
	C	4456	CCG1138	C	4977		CEHV100M25
	C	4457	CCG1138	C	4981		CKSRYB105K10
	C	4458	CKSQYB105K16	C	4982		CKSRYF104Z25
	C	4459	CCG1140	C	4983		CSZS100M10
	C	4461	CKSRYB223K50	C	4991		CKSRYF104Z25
	C	4462	CKSQYB105K16	C	4992		CKSRYF104Z25
C	C	4463	CKSRYB104K25	Miscellaneous Parts List			
	C	4464	CKSRYB104K25				
	C	4465	CCG1138	Speaker			
	C	4466	CCG1138				
	C	4467	CCH1228				
	C	4468	CSZSR470M10				
	C	4601	CSZSR330M10				
	C	4602	CKSRYF104Z25				
	C	4603	CKSRYF104Z25				
	C	4605	CKSRYF104Z25				
D	C	4621	CKSRYB103K50				
	C	4651	CKSRYF104Z25				
	C	4681	CKSRYB102K50				
	C	4682	CKSRYB102K50				
	C	4683	CKSRYB102K50				
	C	4684	CKSRYB102K50				
	C	4685	CKSRYB102K50				
	C	4686	CKSRYB102K50				
	C	4687	CKSRYF104Z25				
	C	4801	CSZSR4R7M25				
	C	4802	CKSRYF104Z25				
	C	4803	CSZS100M10				
	C	4804	CKSRYF104Z25				
	C	4805	CSZSR330M10				
	C	4806	CKSRYF104Z25				
E	C	4807	CSZSR33M35				
	C	4808	CKSRYF104Z25				
	C	4809	CKSSYF104Z16				
	C	4810	CKSSYF104Z16				
	C	4831	CKSSYF104Z16				
	C	4832	CKSRYF104Z25				
	C	4901	CKSRYF104Z25				
	C	4902	CSZSR330M10				
	C	4903	CFHSQ562J16				
	C	4904	CSZSR330M10				
	C	4905	CKSRYB102K50				
	C	4951	CKSRYB104K25				
	C	4952	CEHV220M35				
	C	4953	CKSRYB104K25				
	C	4954	CKSRYB105K10				
F							

6. ADJUSTMENT

6.1 POWER SUPPLY ASSY SECTION ADJUSTMENT

● Adjustment point



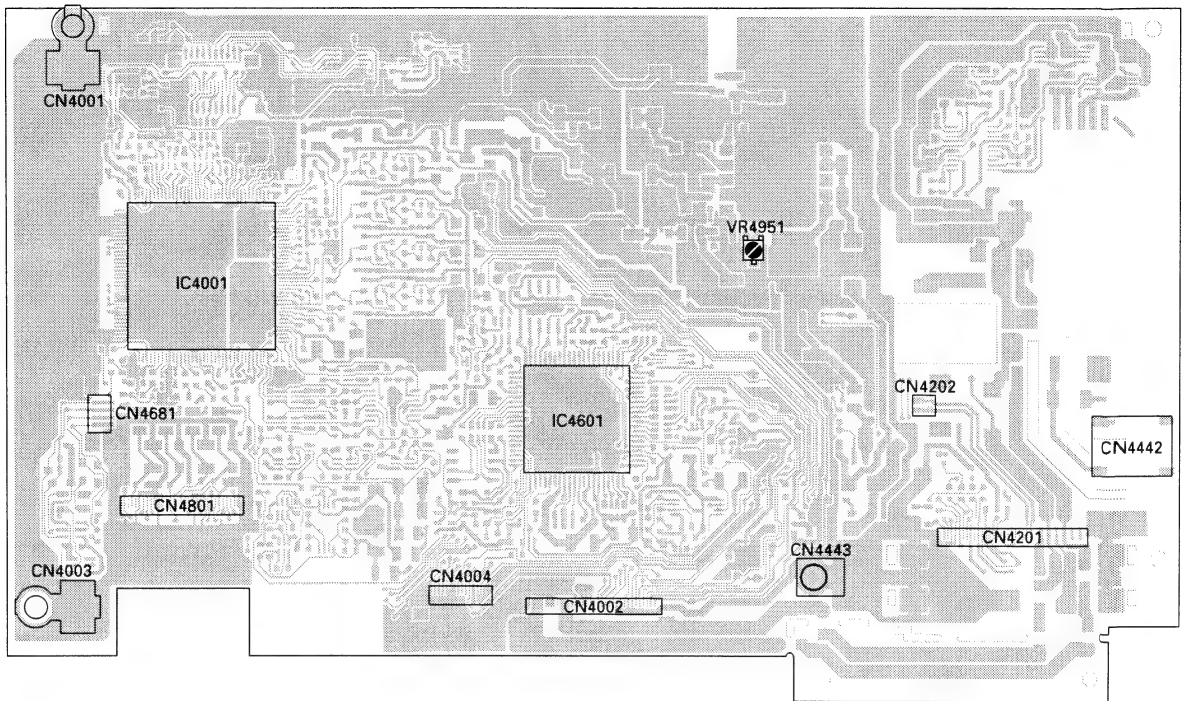
Step	Adjustment item	Mode	Input (input test pin,specs, other conditions)	Output (measuring point, waveform)	Measuring instruments	Specs	Adjusting point
1	Mother Unit adjustment preparation		BU, ACC, 14.4V				
2	SYS9V verification	VTR		Measuring point :TP1823	Multi Meter	$8.6V \pm 0.5V$	
3	SYS5V verification	VTR		Measuring point : TP1827	Multi Meter	$5.0 \pm 0.5V$	
4	SP VOL control voltage verification	VTR		Measuring point : SPVOL	DC V Meter	$0.86V \pm 0.03V$ DC	
5	Main video level	VTR	Input test pin: AUX1VO 100 IRE (white 100%), 1.0Vp-p, (input via 75ohms)	Measuring point: MONVBS 	Oscilloscope	$0.75V \pm 0.03V_{p-p}$ Measure between the sync tip and 100 IRE (top level).	VR1261

6.2 MONITOR ASSY SECTION ADJUSTMENT

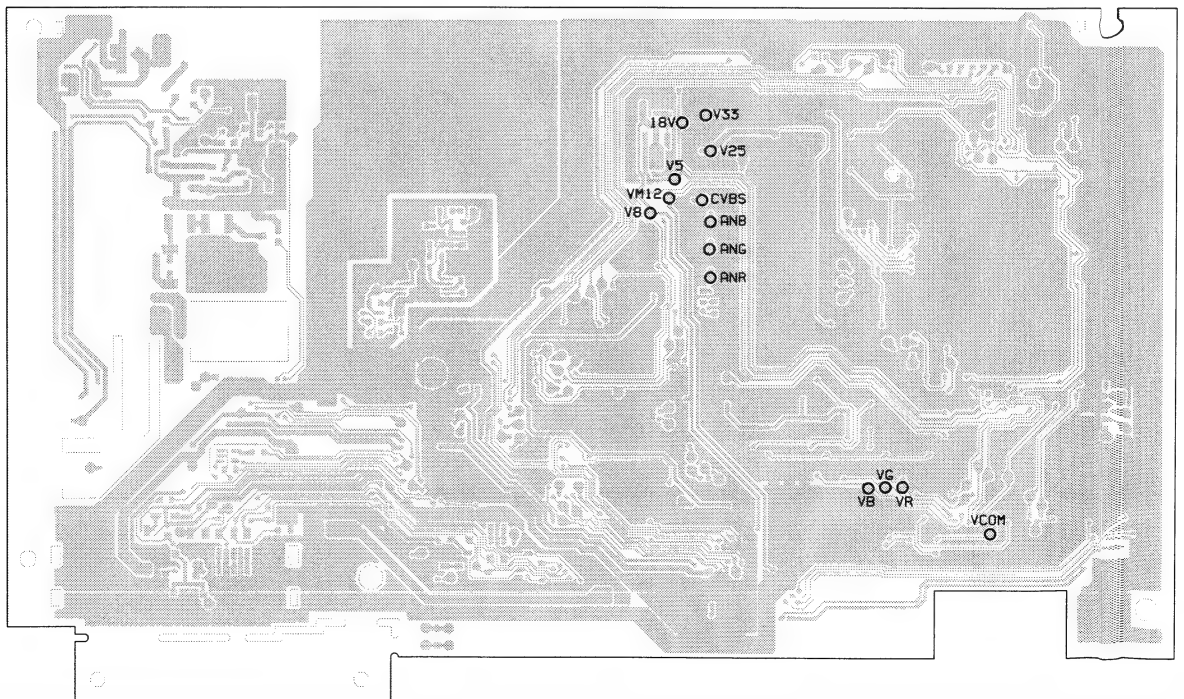


● Adjustment point

MONITOR PCB (SIDE A)




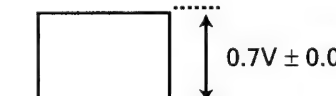
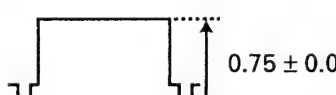
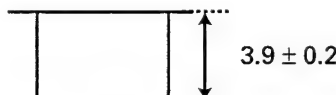


MONITOR PCB (SIDE B)





Notes:

- 1) When the power supply for TC90A64AF-P (IC4001) is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL).
The IIC lines can accept a maximum of 5V.
- 2) In the following table, SA**h is a sub-address of TC90A64AF-P.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	3.3V power supply adjustment	Apply 14.4V to TP VVI.	(V33)	VR4951	$V33 = 3.3V \pm 0.05V$	
2	3.3V power supply verification	Apply 14.4V to TP VVI.	(V33)	—	$V33 = 3.3V \pm 0.1V$	
3	2.5V power supply verification	Apply 14.4V to TP VVI.	(V25)	—	$V25 = 2.5V \pm 0.2V$	
4	5V power supply verification	Apply 14.4V to TP VVI.	(V5)	—	$V5 = 5.0V \pm 0.3V$	
5	8V power supply verification	Apply 14.4V to TP VVI.	(V8)	—	$V8 = 8.0V \pm 0.6V$	
6	18.5V power supply verification	Apply 14.4V to TP VVI.	(V18)	—	$V18 = 18.5V \pm 0.8V$	
7	-12V power supply verification	Apply 14.4V to TP VVI.	(VM12)	—	$VM12 = -12.0V \pm 0.6V$	

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
8	Vcom amp output Voltage waveform Verification	Any input signal	(VCOM)	-	 $4.50 \pm 0.20V$	
9	Input waveform verification (RGB)	Apply a white 100% signal to TP AVR,ANG, ANB.	(ANR,ANG, ANB)	-	 $0.7V \pm 0.02V$	The signal generator should be used via 75 ohms. (specs in desinging : $75.0 \pm 0.2ohms$)
10	Input waveform verification (composite)	Apply a white 100% signal to TP CVBS.	(CVBS)	-	 $0.75 \pm 0.04V$	The signal generator should be used via 75 ohms.
11	RGB amp output voltage waveform verification	Apply a black signal to TP ANR,ANG,ANB. (Video level:0%)	(VG)	-	 $3.9 \pm 0.2V$	The input signal has no setup. (Apply a black signal to TP CVBS)
12	Gamma 0 Verification	Apply a 10-step signal to TP ANR,ANG,ANB.	(VG)	-	 The first-step $A = 0.50V \pm 0.1V$ $A = (A1+A2)/2$	The input 10-step signal has no setup.
13	Gamma 2 verification	Apply a 10-step signal to TP ANR,ANG,ANB.	(VG)	-	 The 10-step $A = 3.10 \pm 0.15V$ $A = (A1+A2)/2$	The input 10-step signal has no setup. If the measured value is out of specs, change the setting of SA24h D11 - 8 (γ 2 inflection point: GAMMA2 in the line adjustment 1 mode) (Register setting specs: 4 + 1)

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
14	B SUB BRIGHT	Apply a 10-step signal to TP ANR,ANG, ANB.	(VG and VB)	Register setting of SA39h D11 - 8	Adjust the first step levels of the G waveform and the B waveform. 	Register setting specs : 8 ± 2 (specs in designing: 8 ± 1) In the Line adjustment 2 mode, SUB BRI B can be used as the adjusting point.
15	B SUB CONTRAST	Apply a 10-step signal to TP ANR,ANG, ANB.	(VG and VB)	Register setting of SA26h D7 - 1	Adjust the 10th step levels of the G waveform and the B waveform. 	Register setting specs: 64 ± 3 (specs in designing: 64 ± 2) In the Line adjustment 2 mode, SUB CON B can be used as the adjusting point.
16	R SUB BRIGHT	Apply a 10-step signal to TP ANR,ANG, ANB.	(VG and VR)	Register setting of SA39h D15 - 12	Adjust the first step levels of the G wave form and the R waveform.	Register setting specs: 8 ± 2 (specs in designing: 8 ± 1) In the Line adjustment 2 mode, SUB BRI R can be used as the adjusting point.
17	R SUB CONTRAST	Apply a 10-step signal to TP ANR,ANG, ANB.	(VG and VR)	Register setting of SA26h D15 - 9	Adjust the 10th step levels of the G waveform and the R waveform.	Register setting specs: 64 ± 3 (specs in designing: 64 ± 2) In the Line adjustment 2 mode, SUB CON R can be used as the adjusting point.
18	Horizon dot position	Any input signal	—	Register setting of SA2Ah D3 - 0	9(1001)	After being written in,the setting value of EEP-ROM is checked. 2 mode,DOT CLK can be used as the adjusting point.
19	Aging	Any input signal	—	—	Keep the unit in the operation mode for 30 minutes or longer.	
20	Flicker	Input a signal for alternate white and black lines to TP ANR, TP ANG and TP ANB.	(Screen)	Register setting of SA22h D15 - 8	Adjust so that the flickers become minimum in all	If it input a signal for alternate white into TP CVBS, it is possible. (However, adjustment by RGB has priority.) The luminance level of the input signal: 50%. In the flicker adjustment mode, COM DC can be used as the adjusting point.

●EEPROM setting mode

[Operations]

To enter the setting mode, while keeping the EPRTTEST terminal(probe land EPRTTEST) at "Low", turn reset the monitor micro computer. To switch between the adjustment modes, click the joystick.

Flicker adjustment mode

Line adjustment 1 mode

Line adjustment 2 mode

Dimmer parameter setting mode

[↑ ↓] button: Used to select a desired adjustment item in each mode

[← →] button: Used to adjust the selected item

Notes:

1) The setting values are written in the EEPROM, and then the read-out data is displayed on the screen.

WRITE and READ operations are processed by the block data of 16 bits.

The total bits for the settings depend on adjusting items.

2) For CS (Check Sum) items, when the settings are changed, the CS value is written in 8 bits by applying the exclusive OR (XOR). The CS value is first written in the EEPROM, and then the read-out data is displayed. If the written data is different from the read-out data, the letter color for the read-out data is changed.

Memory items and addresses on the EEPROM(IC4651 : S-29131AFJ)

Memory array	EEPROM address	Memory contents	
Bank 1	00H	Dimmer external light threshold (high, low)	
	01H	Backlight output (upper limit, lower limit)	
	02H	Common reverse output center (COM DC)	Common reserve output amplitude (COM AMP)
	03H	Output clamp DC (RGB BIAS)	γ 0 inflection point (GAMMA 0)
	04H	γ 1-3 inflection point (GAMMA 1-3)	
	05H	Output sub contrast R (SUB CON R)	Output sub contrast B (SUB CON B)
	06H	Sub brightness R after γ circuit (SUB BRI R)	Sub brightness B after γ circuit (SUB BRI B)
	07H	Clock phase adjustment (DOT CLK)	
	08H	Sharpness (SHARPNESS)	
	09H	Touch panel X coordinates 1	Touch panel Y coordinates 1
	0AH	Touch panel X coordinates 2	Touch panel Y coordinates 2
	0BH	Touch panel X coordinates 3	Touch panel Y coordinates 3
	0CH	Touch panel X coordinates 4	Touch panel Y coordinates 4
	0DH	Touch panel X coordinates 5	Touch panel Y coordinates 5
	0EH	Touch panel X coordinates 6	Touch panel Y coordinates 6
	0FH	Touch panel X coordinates 7	Touch panel Y coordinates 7
	10H	Touch panel X coordinates 8	Touch panel Y coordinates 8
	11H	Touch panel X coordinates 9	Touch panel Y coordinates 9
	12H	Touch panel X coordinates 10	Touch panel Y coordinates 10
	13H	Touch panel X coordinates 11	Touch panel Y coordinates 11
	14H	Touch panel X coordinates 12	Touch panel Y coordinates 12
	15H	Touch panel X coordinates 13	Touch panel Y coordinates 13
	16H	Touch panel X coordinates 14	Touch panel Y coordinates 14
	17H	Touch panel X coordinates 15	Touch panel Y coordinates 15
	18H	Touch panel X coordinates 16	Touch panel Y coordinates 16
	19H	Touch panel calibration adjustment result	Touch panel outermost circumference inspection adjustment result
	1AH	Outermost Xmin	Outermost Ymin
	1BH	Outermost Xmax	Outermost Ymax
	1CH	Check sum address (00H-1BH)	
	1DH	Common reverse output center(Reference)	
	1EH	Clock phase adjustment initial value	
	1FH	Don't care	

A

Memory array	EEPROM address	Memory contents	
Bank 2	20H	External light of dimmer adjustment(H)	Back light of dimmer adjustment(H)
	21H	External light of dimmer adjustment(M)	Back light of dimmer adjustment(M)
	22H	External light of dimmer adjustment(L)	Back light of dimmer adjustment(L)
	23H-3FH	Don't care	

[Displays in each mode]

In the following figures, the letters and numbers surrounded by a large square are for OSD examples.

B

On the screen, the adjustment names and the settings (or written data) are listed.

The settings (or written data) will change when some adjustments are made in each mode.

* The following examples show the maximum values.

(1) Flicker adjustment mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Common reverse output center	[0 - 255]	COM DC	255		

C

(2) Line adjustment 1 mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Bright (SA22: B7-2)	[0 - 63]	BRIGHT	63		LINE1
Contrast (SA25: B7-1)	[0 - 127]	CONTRAST	127		
Common reverse output center	[0-255]	COM DC	255		
Common reverse output amplitude	[0-63]	COM AMP	63		
Output clamp DC	[0-63]	RGB BIAS	63		
Y0 inflection point	[0-15]	GAMMA0	15		
Y3 inflection point	[0-15]	GAMMA3	15		
Y2 inflection point	[0-15]	GAMMA2	15		
Y1 inflection point	[0-31]	GAMMA1	31		
				CS	FFFF

E

Notes:

1) CONTRAST data

The CONTRAST data is adjustable, and used as reference data for other adjustment items, which is not memorized in the EEPROM.

2) BRIGHT and COM AMP data

The BRIGHT and COM AMP adjustments are made by using the same 2-screen IC register(SA22h B7-2: common reverse output amplitude).

Therefore, adjusting one of the data will change the other one.

F

(3) Line adjustment 2 mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Bright (SA22: B7-2)	[0 - 63]	BRIGHT	63		LINE2
Contrast (SA25: B7-1)	[0 - 127]	CONTRAST	127		
Output sub contrast R	[0 - 127]	SUB CON R	127		
Output sub contrast B	[0 - 127]	SUB CON B	127		
Sub brightness R after γ circuit	[0 - 15]	SUB BRI R	15		
Sub brightness B after γ circuit	[0 - 15]	SUB BRI B	15		
Clock phase adjustment	[0 - 15]	DOT CLK	15		
Sharpness	[0 - 3]	SHARPNESS	3		
				CS	FFFF

Notes:

1) CONTRAST data

The CONTRAST data is adjustable, and used as reference data for other adjustment items, which is not memorized in the EEPROM.

2) SUB BRI R and SUB BRI B data

The displayed value or EEPROM written data is different from the setting value for the 2-screen IC register (IC4001 : TC90A64AF-P).

(Before displayed on the screen, the setting value is converted via some software.)

Displayed value (adjusting value) (DEC)	E2PROM written value. (DEC)	2-screen IC register setting (BIN)	
15	15	0111	(MAX)
14	14	0110	
.	.	.	
.	.	.	
9	9	0001	
8	8	0000	(TIP)
7	7	1111	
.	.	.	
.	.	.	
1	1	1001	
0	0	1000	(MIN)

(4) Dimmer parameter setting mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Backlight output (MAX)	[0 - 255]	BL MAX	FF		DIMMER
Backlight output(MIN)	[0 - 255]	BL MIN	FF		
Dimmer threshold (high)	[0 - 255]	REF H	FF		
Dimmer threshold (low)	[0 - 255]	REF L	FF		
External light point (high)	[0 - 255]	LUM H	FF		
External light point (middle)	[0 - 255]	LUM M	FF		
External light point (low)	[0 - 255]	LUM L	FF		
Backlight point (high)	[0 - 255]	BL H	FF		
Backlight point (middle)	[0 - 255]	BL M	FF		
Backlight point (low)	[0 - 255]	BL L	FF	CS	FFFF

Note:

The dimmer point data is memorized in the EEPROM, but not treated as a CS item. It's because the settings are adjustable by the user.

A

● Dot Clock Adjustment Mode

[Operations]

- [Dot Clock adjustment mode] starting procedure
Reset start while pressing the [NAVI MENU] and [VOL+] Keys together.
- [Dot Clock adjustment mode] cancellation Monitor's microcomputer OFF.
- The operation after this should use Navigation's remote controller.
- [] button : Used to select a desired adjustment item in each mode.
- [—] button : Used to adjust the selected item.

[EEPROM : S-29131AFJ]

B

The setting values are written in the EEPROM and then the read-out data is displayed on the screen.
WRITE and READ operations are processed by the block data of 16 bits.

[Display]

In the following figures, a large square are for OSD examples.

Dot Clock adjustment mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Clock phase adjustment	[0 - 15]	DOT CLK	15		
Clock phase adjustment (initial)	[0 - 15]	[FACTORY	8]	
Common reverse output center	[0-255]	COM DC	255		
Common reverse output center adjustment (initial)	[0-255]	[FACTORY	140]	

* CS(Check Sum)display is not performed.

D

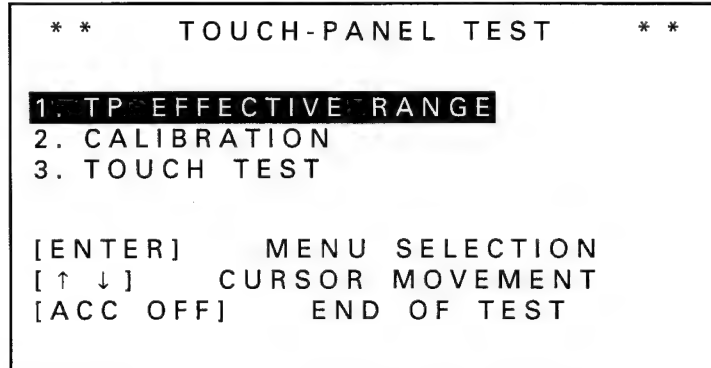
E

F

6.3 TOUCH PANEL TEST MODE

[To enter the test mode]

Reset start while pressing the [NAVI/MENU] and [VOL(-)] Keys together.



[Operations]

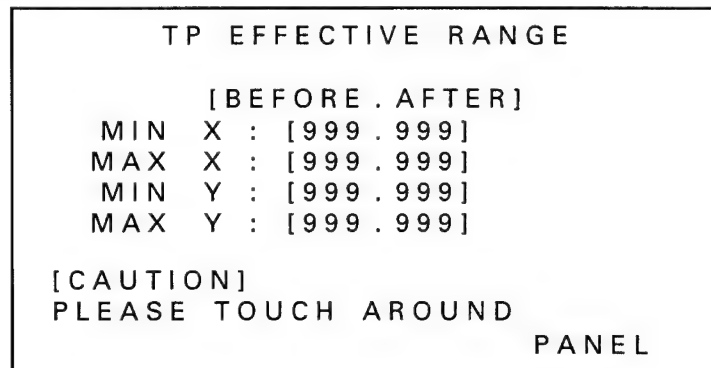
[↑ ↓] button : Used to select a desired test mode item in each mode.

[A.MENU] button : Select the test mode item.

When finishing the above checks, exit from the test mode by turning off the ACC.

1. TP EFFECTIVE RANCE

Check the edge of the TP screen and memorize the checking data to EEPROM.



[Adjustment steps]

- 1) Trace the edge of the screen along the monitor resin frame with a round-headed thing to obtain the coordinates.
- 2) Press the [BACK] key.
- 3) If the checking result is within the allowable range, "OK" will be displayed in the center of the screen. If not, "NG" will be displayed.

● Reference value

AFTER initial value

	MIN	MAX
X	90	180
Y	90	180

BEFORE initial value (EEPROM setting initial value)

	MIN	MAX
X	43	247
Y	50	238

AFTER tolerance value

	MIN	MAX
X	25-65	225-265
Y	30-70	220-260

A

2. CALIBRATION

By touching the (+) marks on the screen one by one, their calibration results are memorized in the EEPROM.

+13	+12	+5	+4
+14	+11	+6	+3
+15	+10	+7	+2
+16	+17	+9	+8
			+1

B

■

- * In the above figure, the numbers after (+) (from 1 to 17) shows the order where the cursor moves.
- * When the 17th (+) mark is pressed, "FINISHED" will be displayed.

[Adjustment steps]

- 1) Push the 16 (+) marks one by one by following the cursor's movement. (The plus marks appear in turn on the screen. When you push one properly, the next mark will be displayed.)
- 2) Lastly, push the 17th (+) mark. "FINISHED" will be displayed in the center of the screen.

C

When pressing the [BACK] key before the 17 places, "NG" is displayed on the screen, then return the display to the menu screen after 2 second.

■

3. TOUCH TEST

When the touch panel is pushed, coordinates before and after correction are displayed.

TOUCH TEST	
[BEFORE . AFTER]	
X :	[999 . 999]
X :	[999 . 999]

D

■

E

[Adjustment steps]

- 1) Push the touch panel, then coordinates before and after correction are displayed.

Pressing the [BACK] key will return the display to the menu screen.

■

F

6.4 SINGLE OPERATION MODE

● To operate the Power Supply Assy only

1. Setting of the pin 41 (ST1) and 42 (ST2) of the IC1601 in single operation mode is as follows.

ST2	ST1	Contents
H	H	Normal operation mode
H	L	Normal operation mode
L	H	Single operation mode (Turns on with VTR2 source)
L	L	Single operation mode (Turns on with VTR1 source)

H : Not connect

L : Connect to the ground

2. Press the RESET button

*Operates by the Monitor Assy un-connecting.

*The composite video signal output (FRONT, REAR) outputs the composite video signal of each source.

● To operate the Monitor Assy only

Setting of the TP1, TP2 and TP3 in single operation mode is as follows.

TP2	TP3	TP1	Contents
L	H	H	For aging (See p.66.)
L	-	L	EEPROM setting mode (See p.67.)
L	L	H	Touch panel test mode (See p.71.)

H : Not connect

L : Connect to the ground

Contents of single operation mode

[For aging]

MVIPW : ON
MFLPW : ON
DIMMER : 5V (FFH)
BRIGHT : ± 0
CONTRAST : ± 0
WIDE MODE : Full size

[EEPROM setting mode]

MVIPW : ON
MFLPW : ON
DIMMER : The calculated value from coordinates of EEPROM data
BRIGHT : ± 0
CONTRAST : ± 0
WIDE MODE : Full size

[Touch panel test mode]

MVIPW : ON
MFLPW : ON
DIMMER : The calculated value from coordinates of EEPROM data
BRIGHT : ± 0
CONTRAST : ± 0
WIDE MODE : Full size

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 DISASSEMBLY

● Monitor Assy

*) AVD-W6210/EW is different partially from the following photos, but disassembly method is the same.

● Removing the Case (Fig.1)

➡ 1 Remove the four screws.

Disconnect the connector and then remove the Case.

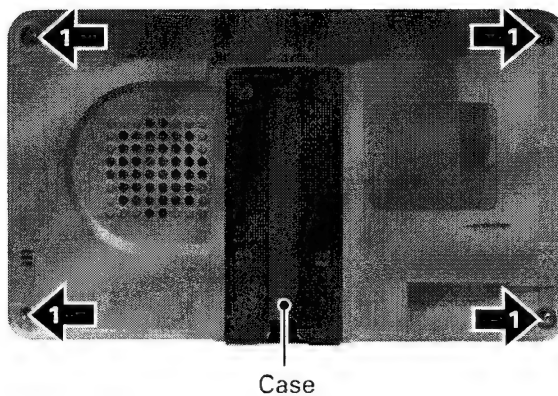


Fig.1

● Removing the Monitor PCB (Fig.2)

➡ 1 Remove the five screws.

Disconnect the connector and then remove the Monitor Unit.

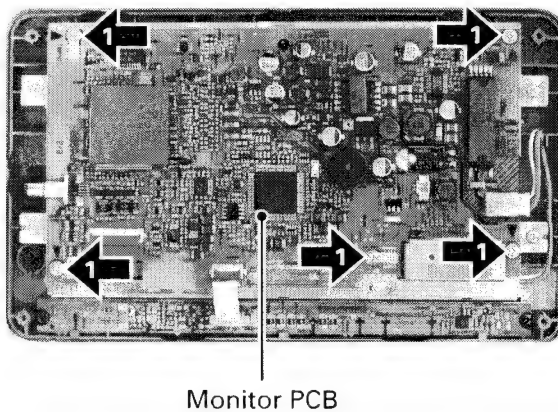


Fig.2

● Power Supply Assy

● Removing the Case (Fig.1)

- 1** Remove the six screws and then remove the Case.

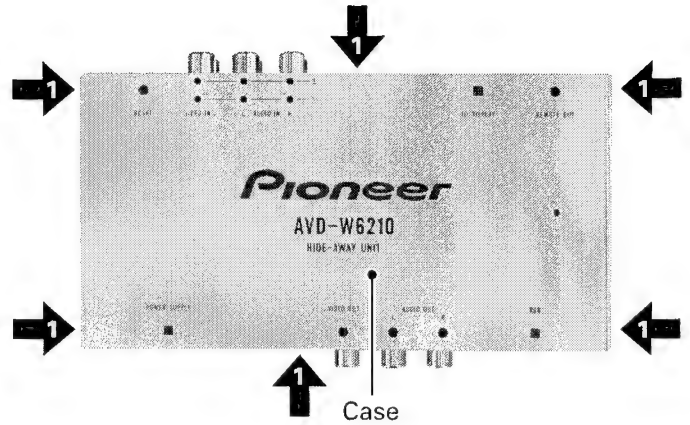
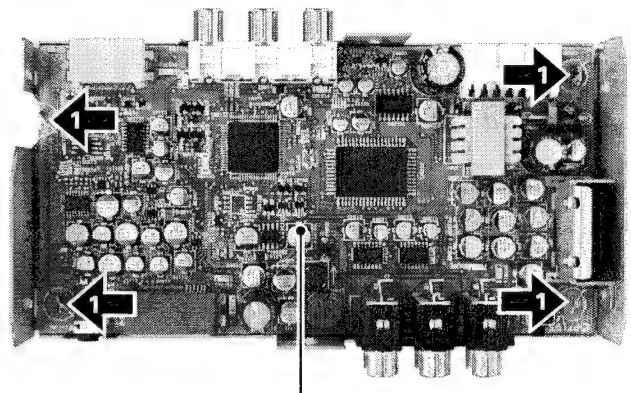


Fig.1

● Removing the Mother Unit (Fig.2)

- 1** Straighten the tabs at four locations indicated. Remove the Mother Unit.



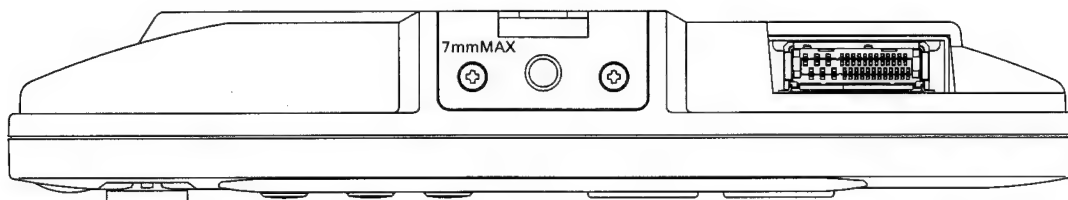
Mother Unit

Fig.2

7.1.2 CONNECTOR FUNCTION DESCRIPTION

A

● MONITOR ASS'Y (AVD-W6210/UC)



RGB CONNECTOR

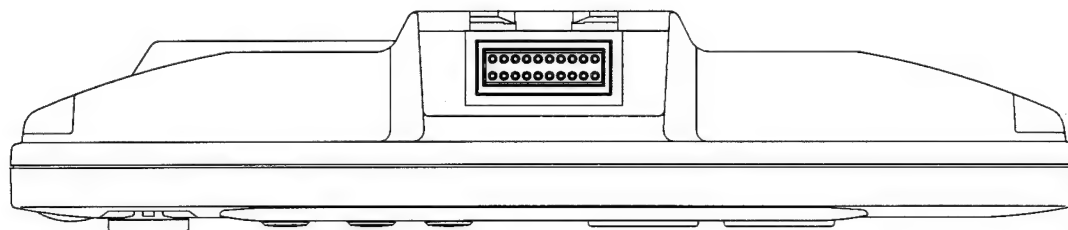
30	28	26	24	22	20	18	16	14	12	10	8	6	4	2
29	27	25	23	21	19	17	15	13	11	9	7	5	3	1

1 : ANR	11 : GND	21 : NC
2 : ANG	12 : SWAC56	22 : NC
3 : ANB	13 : DSENS	23 : SPP
4 : GNDSIG	14 : MONVBS	24 : SPM
5 : CSYNC	15 : GNDV	25 : PWRVI
6 : HTXD	16 : NC	26 : PWRFL
7 : HRXD	17 : NC	27 : GNDVI
8 : MOREM	18 : NC	28 : GNDFL
9 : NC	19 : NC	29 : NC
10 : YS	20 : NC	30 : NC

B

C

● MONITOR ASS'Y (AVD-W6210/EW)



RGB CONNECTOR

2	4	6	8	10	12	14	16	18	20
1	3	5	7	9	11	13	15	17	19

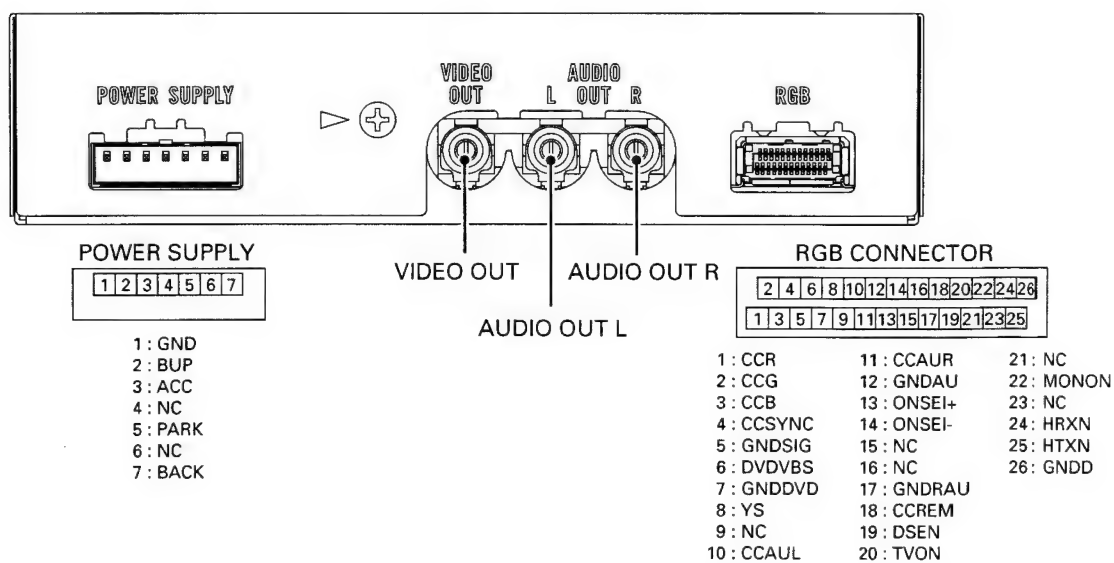
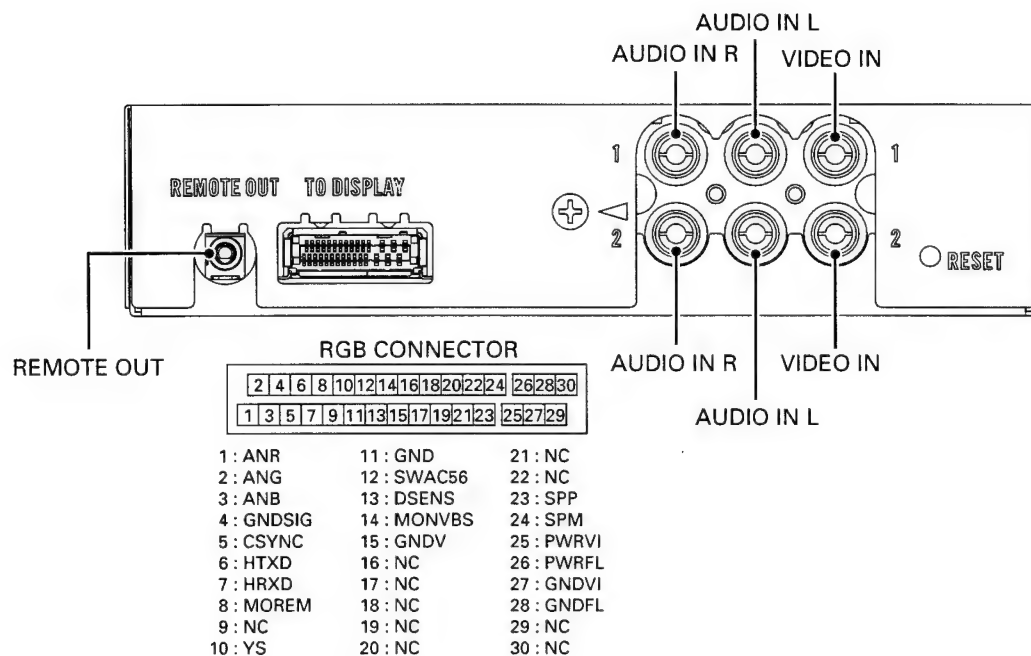
1 : GNDVI	11 : GNDV
2 : GNDFL	12 : YS
3 : PWRFL	13 : DSEN
4 : GNDE	14 : SP+
5 : PWRVI	15 : SP-
6 : CSYNC	16 : MOREM
7 : SWACC5	17 : HRXD
8 : ANR	18 : HTXD
9 : ANG	19 : GNDSIG
10 : ANB	20 : MONVBS

D

E

F

● POWER SUPPLY ASS'Y



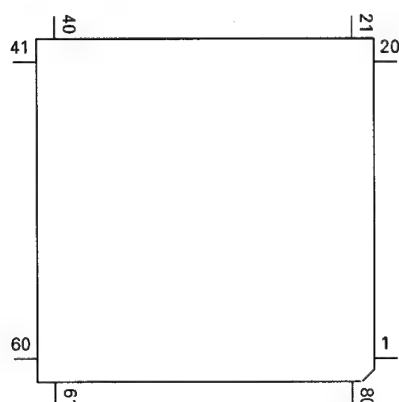
7.2 IC

● Pin Functions(PE5375A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1-3	NC			Not used
4	AVSS			GND potential for A/D converter
5	EVOL	O	C	Monitor speaker volume output
6	NC			Not used
7	AVREF1			Reference voltage input for D/A converter
8	RXN	I		Data input from navigation microcomputer (UART)
9	TXN	O	C	Data output to navigation microcomputer (UART)
10	NC			Not used
11	RXD	I		Data input from monitor microcomputer (UART)
12	TXD	O	C	Data output to monitor microcomputer (UART)
13,14	NC			Not used
15	TESTIN	I		Chip test input
16	TSI	I		Test mode data input
17	TSO	O	C	Test mode data output
18	TSCK	I		Test mode clock input
19	MUTEV			Not used
20-24	NC			Not used
25	MUTEAU	O	C	Stereophonie voice output overall muting output
26	MIXSP	O	C	Monitor speaker voice output mixing SW output
27	ATTSP	O	C	Monitor speaker voice output ATT
28	MUTEPS	O	C	Monitor speaker voice output mixing front stage muting
29	MUTESP	O	C	Monitor speaker voice output overall muting
30	SCL	O	C	I2C-bus clock output
31	SDA	I		I2C-bus data output/ACC input
32	BKCASEL			Not used
33	VSS			GND
34	NC			Not used
35	ROMDATA			Not used
36	ROMCLK			Not used
37	ROMCS			Not used
38,39	NC			Not used
40	MONPW	O	C	Monitor power supply control output
38	STEST1	I		Hideaway single operation test mode input 1
39	STEST2	I		Hideaway single operation test mode input 2
40-53	NC			Not used
54	REMUTE	O	C	Remote control mute output
55	DREM	O	C	Dummy remote control data output
56	NC			Not used
57	BKSENS	I		Reverse sense input (Back camera)
58	PBSEN	I		Parking brake sense input
59	ILMSEN			Not used
60	RESET	I		Reset input
61	NC			Not used
62	BSENS	I		Backup sense input
63	ASENS	I		ACC sense input
64	SWACPW	O	C	Power supply control output (ACC 5V)
65	SYSPW	O	C	Power supply control output (SYSTEM)
66	NC			Not used
67	VSS0			GND
68	VDD			Power supply
69	X2			Connection of crystal for oscillating main system clock
70	X1			Connection of crystal for oscillating main system clock
71	IC			Connect to GND
72	XT2			Not used
73	XT1			Connect to GND
74	AVDD			A/D converter power supply
75	AVREF			A/D converter reference voltage

Pin No.	Pin Name	I/O	Format	Function and Operation
76,77	TVSL			Not used
78	DSENS	I		Detach sense input
79	RGBARI	I		RGB navigation ON detect input
80	MONON	I		Navigation ON detect input

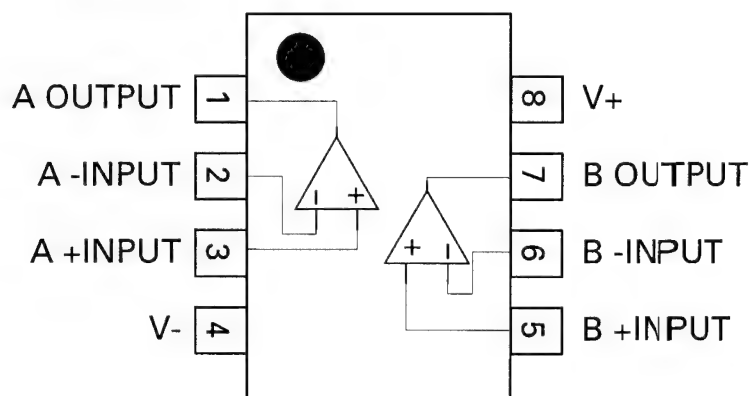
*PE5375A



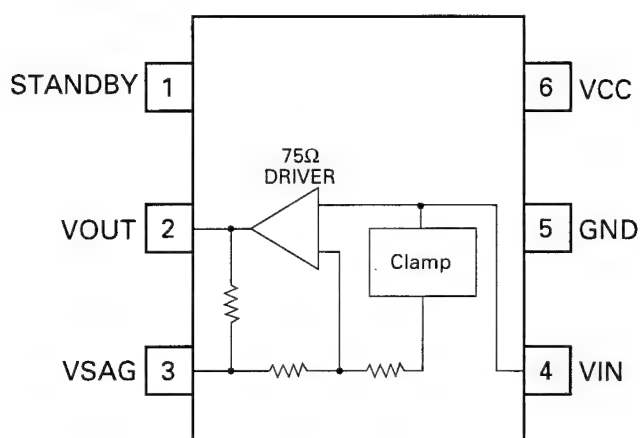
Format	Meaning
C	C MOS

IC's marked by * are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

NJM4558E



TK15405BMI



1

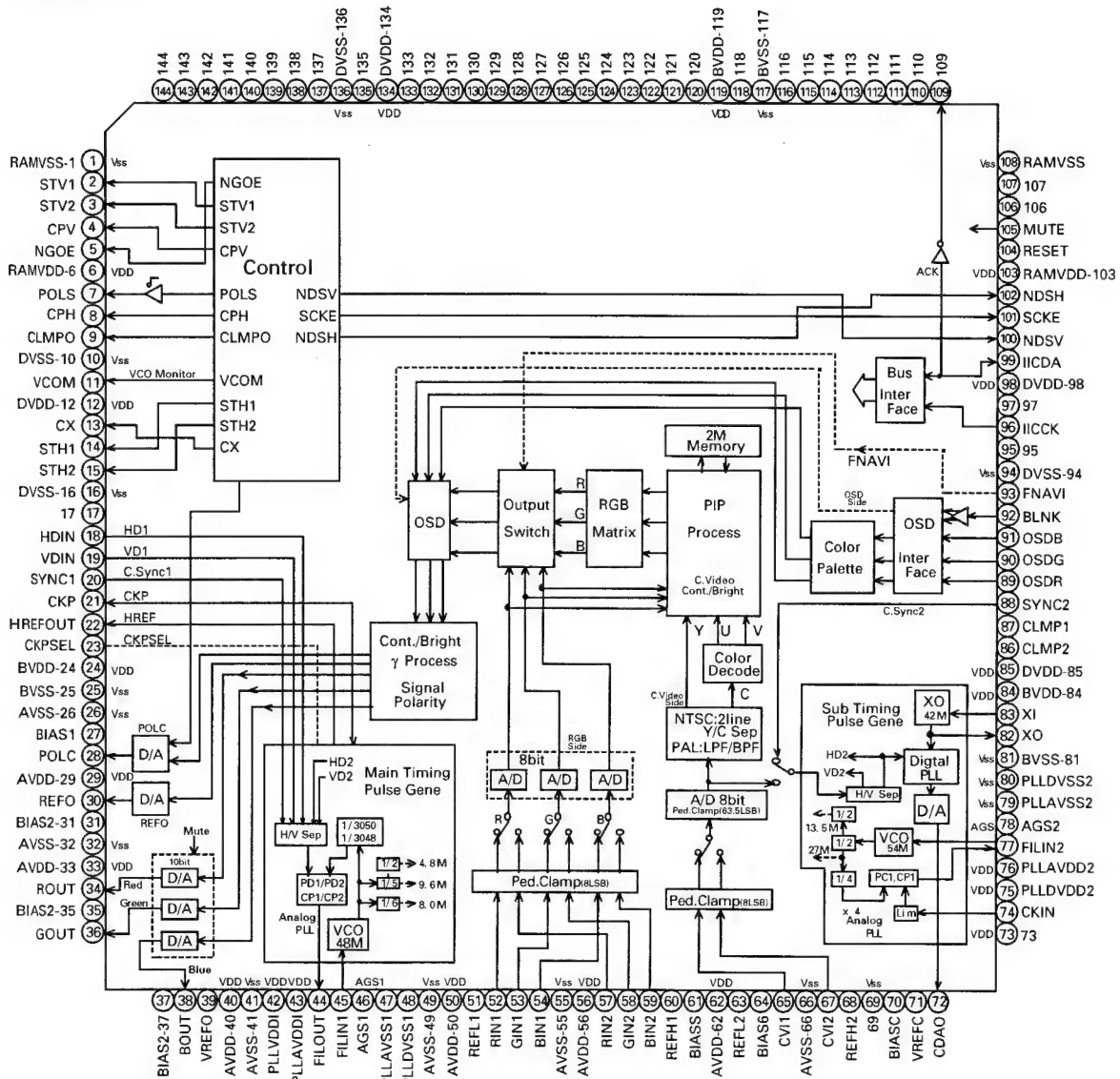
2

3

4

A

*TC90A64AF-P



B

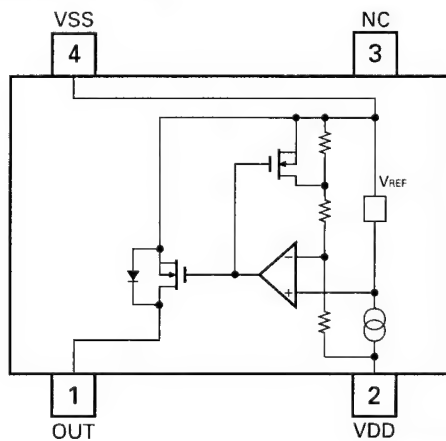
C

D

E

F

*S-80835CNNB-B8U



80

AVD-W6210/UC

1

2

3

4

● Pin Functions (PE5376A)

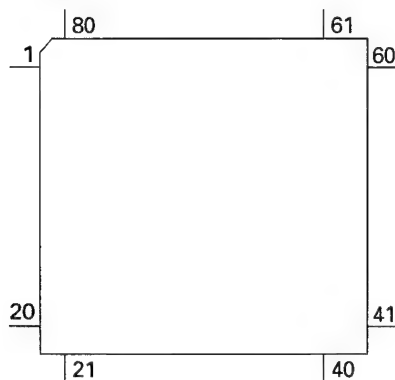
Pin No.	Pin Name	I/O	Function and Operation
1	PNLADX	I	X directions analog input
2	LSEN	I	Lens sense input
3	PNLADY	I	Y directions analog input
4	AVSS		A/D converter GND
5	DIMMER	O	Dimmer analog output
6	NC		Not used
7	AVREF1		D/A converter reference voltage
8	RXD	I	Data input from system microcomputer (UART)
9	TXD	O	Data output to system microcomputer (UART)
10	MFLPW	O	Back light control output
11	MVIPW	O	Picture control output
12	OSDDT	O	OSD data output
13	OSDCK	O	OSD clock output
14	OSDCS	O	OSD chip select output
15	NC		Not used
16	TSI	I	Test program data input
17	TSO	O	Test program data output
18	TSCK	I	Test program clock input
19	OVCHK	I	Back light power supply overcurrent detect input
20	EPRRST	I	EEPROM reset input
21	EPRTST	I	EEPROM data setup mode input
22	STEST	I	Monitor operation mode input
23	NC		Not used
24	PNLXV	O	Hi output is carried out when X directions is detected
25	PNLYV	O	Hi output is carried out when Y directions is detected
26	NC		Not used
27	IICDA	I/O	I2C-bus data outout / ACC input
28	IICCK	O	I2C-bus clock output
29	ICRES	O	I2C-bus reset output
30-32	NC		Not used
33	VSS1		GND
34-37	NC		Not used
38	DI		Not used
39	CLK		Not used
40	CS		Not used
41	ACK2		Not used
42-44	NC		Not used
45	BEEP	O	BEEP
46	EPRCS	O	EEPROM chip select output
47	EPRCK	O	EEPROM serial clock output
48	EPRDO	O	EEPROM serial data output
49	EPRDI	I	EEPROM serial data input
50	EPRPROT	O	EEPROM memory protect output
51	TESTIN	I	Chip test input
52-56	NC		Not used
57	LCDTYPE	I	LCD panel type detect input 1
58	ES3ES4		Not used
59	LCDTYPE	I	LCD panel type detect input 2
60	RESET	I	Reset input
61	REMIN	I	Remote control data input
62	VDDSENS	I	Power supply sense input
63,64	NC		Not used
65	LCDLR	O	LCD panel L / R output
66	TVIND		Not used
67	VSS0		GND
68	VDD1		Power supply
69	X2		Crystal oscillator connection pin
70	X1		Crystal oscillator connection pin
71	VPP		Not used
72	XT2		Not used

A

Pin No.	Pin Name	I/O	Function and Operation
73	XT2		GND
74	VDD0		Power supply
75	AVDD		A/D converter power supply
76	KDT0	I	Analog key data input 0
77	KDT1	I	Analog key data input 1
78	KDT2	I	Analog key data input 2
79	KDT3	I	Analog key data input 3
80	KDT4	I	Analog key data input 4

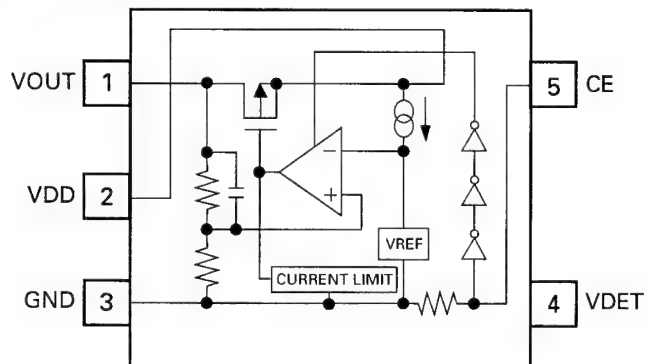
*PE5376A

B



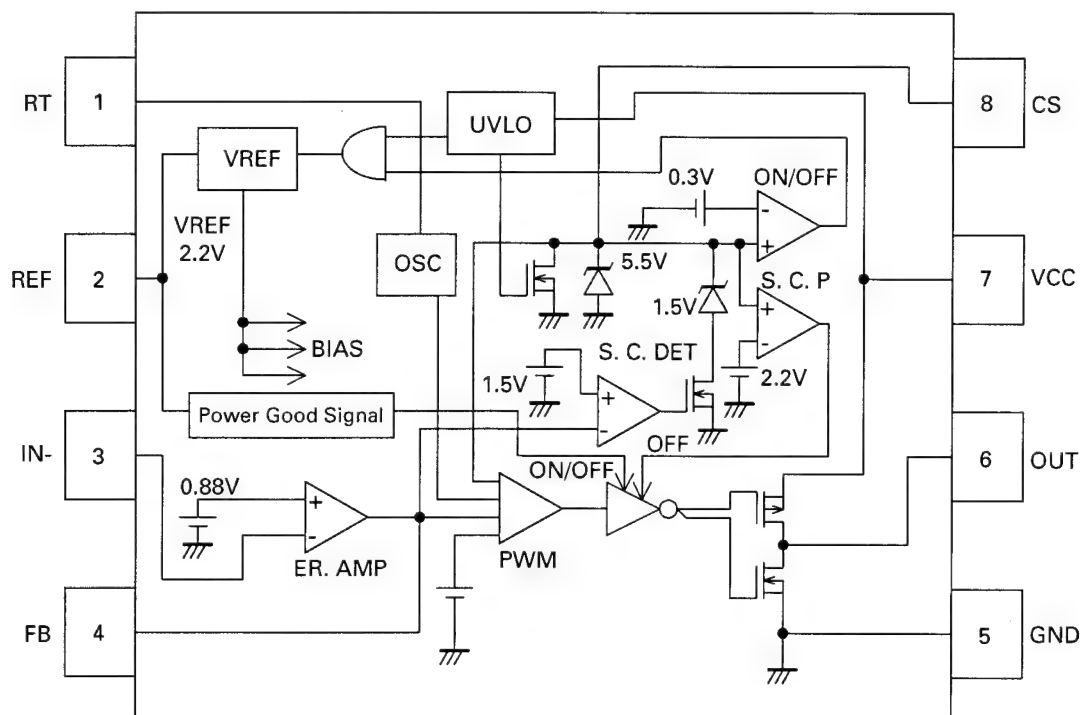
C

R1130H251B



*FA7700V

D



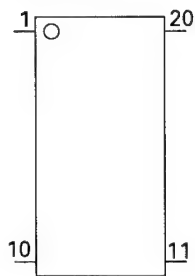
E

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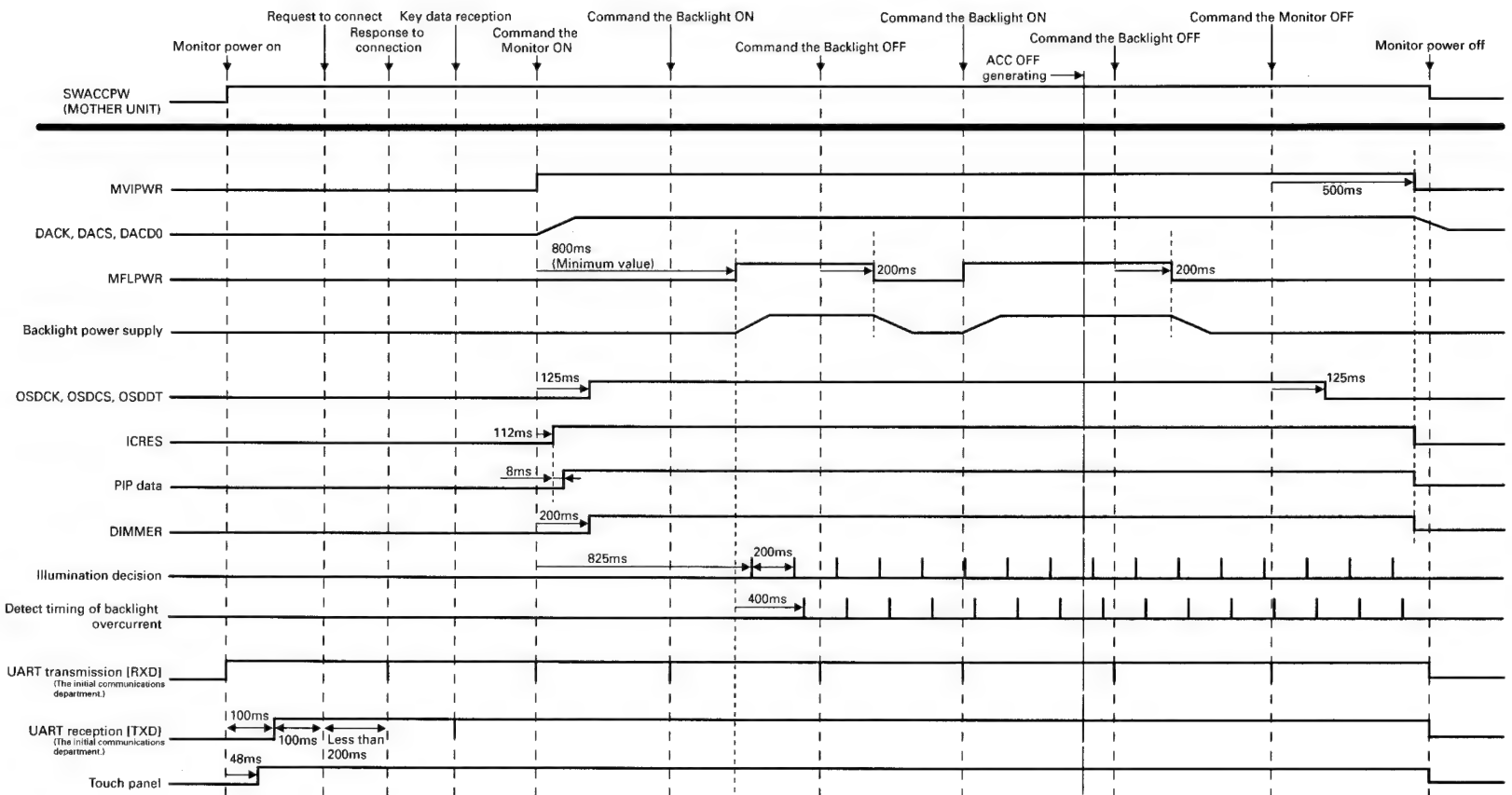
● Pin Functions(PD5703A)

Pin No.	Pin Name	I/O	Function and Operation
1	OSC1	I	External terminal of oscillator circuit for display
2	OSC2	O	External terminal of oscillator circuit for display
3	\overline{CS}	I	Chip select input
4	SCK	I	Serial clock input
5	SIN	I	Serial data input
6	\overline{AC}	I	Auto clear input
7-10	P6-P9	O	Port output
11	VSS		GND
12	P0	O	Port output
13	P1/R	O	Port output or R output
14	P2	O	Port output
15	P3/G	O	Port output or G output
16	P4	O	Port output
17	P5/B	O	Port output or B output
18	HOR	I	Horizontal synchronous signal input
19	VERT	I	Vertical synchronous signal input
20	VDD		Positive power supply terminal

*PD5703A

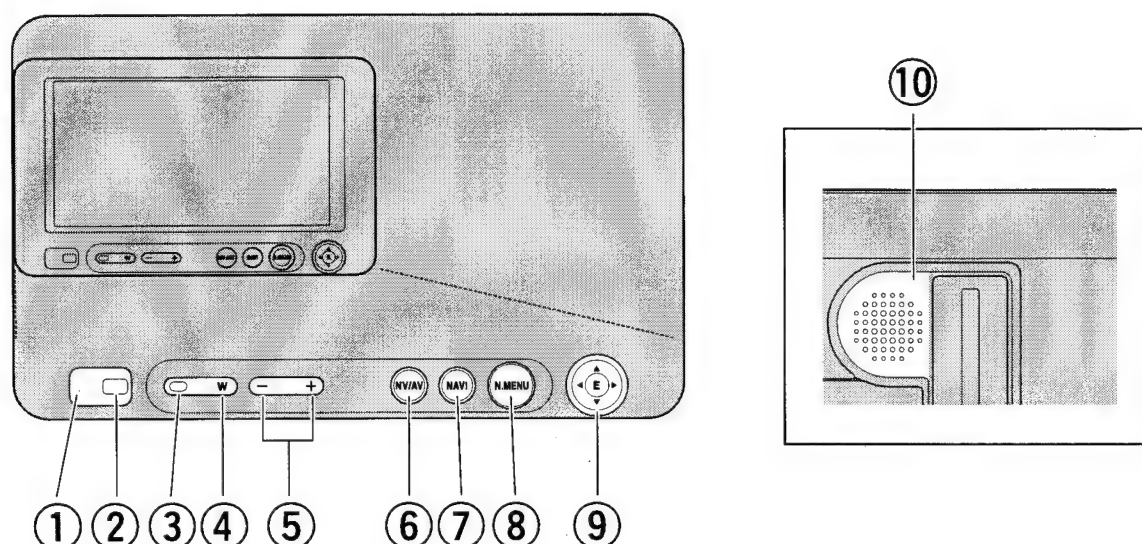


7.3 OPERATIONAL FLOW CHART



8. OPERATIONS

■ Display Unit



① **Signal receptor**

This receiver receives signals from the remote control supplied with the Pioneer Navigation unit and other AV equipment.

② **Ambient light sensor**

Senses ambient light. This system automatically adjusts the brightness of the display to compensate for ambient light.

③ **SOURCE/POWER button**

Switches between sources and switches power ON/OFF.

④ **WIDE button**

Changes the method of enlarging 4:3 video to 16:9 video.

⑤ **Volume control (-/+) buttons**

Adjust the volume of the built-in speaker ⑩.

Note:

- Never set the volume so high that you cannot hear outside traffic and emergency vehicles.

⑥ **NAVI/AV button**

Switches the display to the desired indications. Use to switch between navigation images and the images of each source.

⑦ **NAVI button**

You press this button to view Navigation Map or return to guidance. Also, when the map is scrolled, pressing this button returns to the display of the map of your surroundings.

⑧ **NAVI MENU button**

Pressing this button displays Navigation Menu.

⑨ **MENU-ENTER button**

(▲/▼/◀/▶ buttons)

Use to switch to operate the setup menu for various settings.

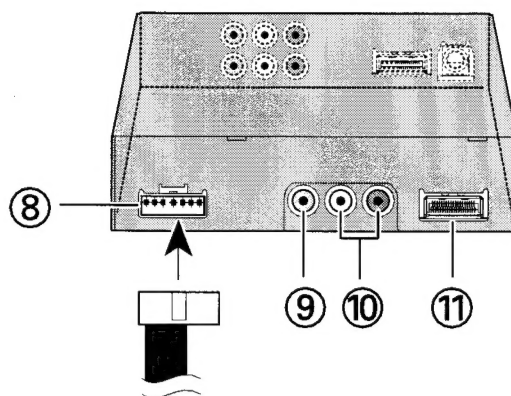
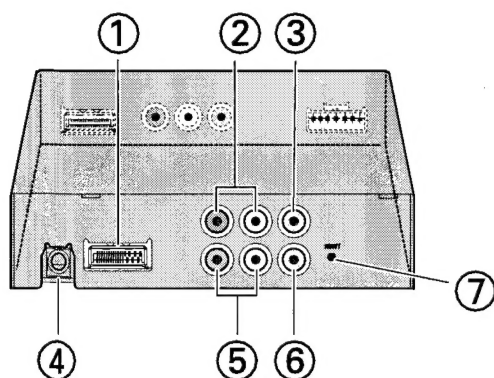
⑩ **Built-in speaker**

Outputs sound from audio equipment connected to this product.

A

■ Hide-away Unit

B



C

① **Display output (brown)**

Connects to the display unit.

② **AV IN1 RCA audio input (white, red)**

Receives stereo audio, as from a VCR, DVD player or other AV equipment.

③ **AV IN1 RCA video input (yellow)**

Receives video, as from a VCR, DVD player or other AV equipment.

D

④ **REMOTE OUT**

Outputs remote control signals. (This part is for future use.)

⑤ **AV IN2 RCA audio input (white, red)**

Receives stereo audio, as from a VCR, DVD player or other AV equipment.

⑥ **AV IN2 RCA video input (yellow)**

Receives video, as from a VCR, DVD player, back-up camera or other AV equipment.

E

⑦ **RESET button**

Resets the display microprocessor. Press with the tip of a ballpoint pen or similar object.

⑧ **Power Supply**

Receives the power cable supplied.

⑨ **RCA video output (yellow)**

Connects to other AV equipment. Video selected with this display is directed to this terminal.

⑩ **RCA audio output (white, red)**

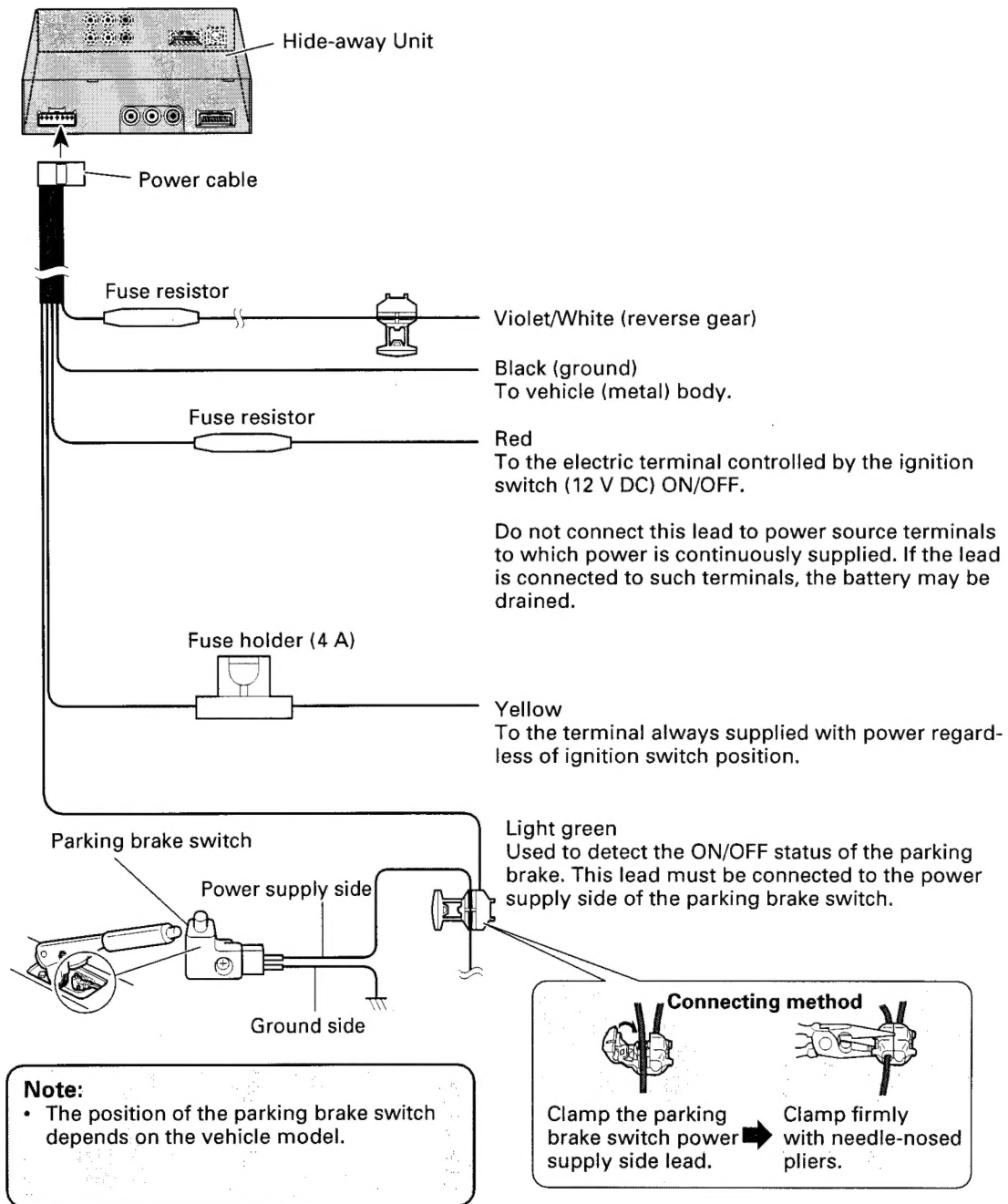
Connects to other AV equipment. Audio selected with this display is directed to these terminals.

⑪ **26-pin input (yellow)**

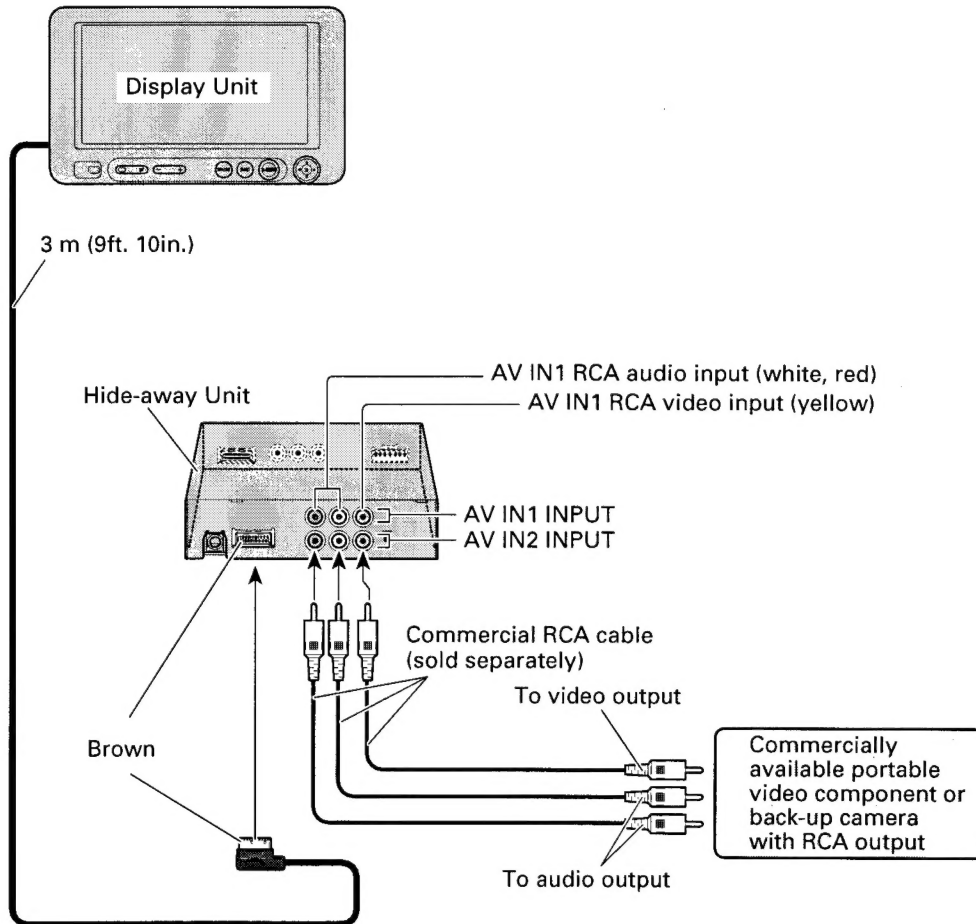
Use to connect a navigation unit or other Pioneer AV equipment.

F

Connecting the Power Cable



A Connection Diagram (VIDEO input)



Note:

- When other AV equipment is connected to the AV IN2 input, setting may be required.

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